4. Preferred Alignment

This section of the report discusses the recommended or preferred alignment of the trail within or near the UPRR corridor. Plan Sheets illustrating the preferred alignment and representative trail cross sections are provided in the **Appendix**. Trail segments are generally to consist of a ten foot wide paved section, with a minimum of two-foot wide shoulders. Intersection improvements and specific design elements at key locations are discussed in **Section 5 - Safety and Intersection Analysis**.

4.1. Segment 1: Niles (Clarke Drive/Old Canyon Road) to Mission Boulevard

This trail segment has the potential to connect to the Alameda Creek Trail, as well as providing a connection to the Bay Area Ridge Trail via EBRPD's Vargas Plateau. Since the adjacent land uses are largely residential, the trail should be located at the center of the alignment to provide the greatest buffer to adjacent residences.

North of Orchard Drive, east-west portions of the alignment are utilized by the UPRR for the Altamont Commuter Express (ACE), a primary passenger rail route that connects the Bay Area with the Central Valley. As an active rail line, any trail alignment within UPRR ROW would have to be negotiated with the railroad owner and operator. Although there is sufficient room on either side to locate a trail at the bottom of the railroad embankment, it is likely that securing an agreement for trail implementation will be complex and should be considered problematic. In addition, trail separation (typically a minimum of 25 feet from rail centerline), security fencing and liability and maintenance agreements would likely be needed. However, there is precedent in the Bay Area for such an arrangement. For instance Eat Bay Regional Park District has a Memorandum of Understanding (MOU) with UPRR to allow a trail within it's ROW between Pt. Wilson (near El Sobrante) northward to and through Pt. Pinole Regional Park.

This area is already used informally as a trail connection (as well as homeless encampment on railroad lands), so formalizing the trail alignment and completing needed safety and design components, such as fencing, may help improve existing conditions, and allow maintenance and policing of the area to be formalized. In this area, opportunities to increase local park areas north of Orchard Drive should be explored, by acquiring the UPRR "triangular parcel" between the abandoned rail spurs. The rail levees or embankments in this area could be lowered, so that the trail is at or slightly above grade near Orchard Drive. (However to reduce overall project costs, some of the excess embankment and ballast materials associated with lowering the trail grade to adjacent backyard levels could be placed here.) This concept would improve connectivity between the streets, school and adjacent open space. Finally, installation of an undercrossing (tunnel) through the ACE alignment would significantly improve connectivity and trail utility. Consideration of an undercrossing would be subject to PUC regulation, in addition to consent from the railroad.

Portions of the alignment are at or above the grade of adjacent homes, and therefore trail users could look down into backyards, something neighboring property owners will likely object to. Where feasible, excess ballast material (gravel base rock) and underlying fill soil should be removed to allow the trail to be lowered to approximate existing grade. In many areas this involves removal of 2 to as much as 6 feet of material. Where needed to ramp to meet existing

overcrossings at Pickering Avenue and Mission Boulevard, the trail should be graded at a maximum 5% slope to accommodate ADA access.
Where possible, existing mature vegetation should remain to provide shading and visual interest. However, screening vegetation and shrubs should generally be avoided, to allow visual access to the area.

The Pickering Avenue overpass should be retrofitted with a safety rail and improved access to adjacent streets (see **Section 5**). Access to the bridge structure should be graded at a maximum 5% slope to grade, with up to 8% slopes allowable for short distances.

At Morrison Canyon Road, there is an opportunity to enhance the drainage channel and creek on adjacent ACFCWCD lands. If enhancement or restoration of this area occurs, trail connections and benches, interpretive signs, kiosks, and other amenities should be considered. In addition, the existing gate at the end of Canyon Heights Drive could be retrofitted for neighborhood access, if desired by the adjacent residents. Planning for the vacant parcel west of the alignment should include local connections to the trail when development is considered.

South of Morrison Canyon, an existing trestle that crosses a small drainage channel was recently removed and should be replaced with a 20 – 25' pre-engineered steel truss bridge. Disturbance to existing wetlands in this area should be minimized. Immediately south of Zacate Avenue, between the UPRR alignment and Stevenson Boulevard, acquisition (or trade) of ROW to improve bicycle connectivity should be considered along the commercial property adjacent to the Mission Boulevard overcrossing, where there is an existing 10 ft. easement/parcel. Access ramps are proposed at the Mission Boulevard overcrossing to improve trail access, and could provide connectivity to the adjacent school. Retrofit of the overpass to include safety railings should be designed to reflect the historic character of the structure.

4.2. Segment 2: Mission Boulevard to Paseo Padre Parkway

This segment is located within the Central Park area and corridor where the BART extension is planned. In this area, the trail will continue south on the abandoned UPRR alignment, with neighborhood trail connections along the ACFCWCD channel, San Carlos Court, and Mission Creek (Gomes Park). At Mission Creek, the trail will turn along the existing path approximately 400 feet to the western UPRR alignment, which will be relocated as part of the BART extension project. Pedestrian crossing improvements at the rail line to connect to the Lake Elizabeth trail system should be completed as part of a separate project. Existing culvert crossings and drainage systems will remain, unless altered as part of the BART project.

The trail entry at Gomes Park and Mission Creek should be upgraded to include benches, kiosks, and signs providing trail route and wayfinding information. Fencing and gates should be designed at a scale to reflect neighborhood character. Trailhead access at Stivers Lagoon or within Central Park should include interpretive displays, route information, and parking. Trail connections to other parts of the City, such as potential trails along ACFCWCD channels to connect to the west, should be designed to provide a direct link between the UPRR trail and Central Park.

At the site of BART's proposed cut and cover of Lake Elizabeth for installation of a tunnel, there is an opportunity to provide a direct connection to the Central Park trail, and avoid additional disturbance of the area's wetlands. This would provide a more direct link to existing trails, and

could be designed to minimize conflicts with the active rail line. This will require close coordination with BART during the final design and implementation phases.

South of the BART tunnel daylight, the trail will be located on the existing UPRR ROW, where the active rail line is to be relocated as part of the BART extension. A short segment immediately south of the tunnel may need to be located at the edge of the riparian wetlands east of Lake Elizabeth, to provide desired separation from the active rail line.

At Stivers Lagoon, trail connections should be considered to link the existing trail system. Access ramps should be a maximum 5% grade to accommodate ADA users. Trail connection opportunities in this segment will provide links via ACFCWCD service roads to trail connections to the west and south, including potential links to the Irvington area.

This area also offers the opportunity for a spur trail to connect Paseo Padre east of the BART alignment. This spur would be on the continuation of the easterly UPRR ROW, and would serve local residents who currently access the area from Paseo Padre Parkway, or the adjacent PG& E utility corridor.

The trail would continue south of Paseo Padre Parkway on a pedestrian overcrossing that has been designed as part of the current grade separation project.

4.3. Segment 3: Paseo Padre Parkway to Washington Boulevard.

This trail segment will be located within a ROW that is to be abandoned as part of the BART project. The trail will be located on the existing railroad embankment, and trail connections should be provided to serve neighborhood streets. Access ramps to provide local connections should be at a maximum 5% grade for ADA accessibility.

A preliminary development proposal for lands between the trail alignment and BART (Irvington Transit Village) calls for development of residential flats and associated amenities. If such a development is approved by the City of Fremont, it would be possible to design the trail to serve both as a secondary emergency vehicle access for the site, and as a trail crossing to serve the proposed Irvington BART station. The designs for the two projects should be coordinated, with potential cost sharing and ROW exchange to accommodate trail connections.

The Washington Boulevard grade separation will accommodate a trail segment under the proposed overpass, in addition to a new surface street to connect local areas. In this area, the trail should be located on the east side of the new street to avoid as many street crossings as possible, and to provide a continuous trail alignment. Local connections to BART and downtown Irvington should be provide, and design elements should incorporate themes identified in the Irvington Concept Plan (2005)

4.4. Segment 4: Washington Boulevard to S. Grimmer Boulevard, and Segment 5: South Grimmer Boulevard to Fremont City Limits.

BART (the rail corridor property owner) has indicated that the trail cannot easily be located within their ROW (*Silicon Valley Rapid Transit Corridor BART Extension to Milpitas, San Jose and Santa Clara Draft Supplemental Environmental Impact Report*, January 2007), but there

may be an opportunity for location within unused portions of the ROW, or perhaps along dual-use service and access roads (pers. comm. Paul Medved, BART, July 22, 2008). Environmental analysis and preliminary design are currently being completed for the BART extension, and placement of a multi-use trail within excess portions of the ROW represents a design challenge and could potentially impact the BART implementation timeline. The remainder of the corridor is heavily utilized as a rail corridor, recognized as an important component of the regional rail network, and is unlikely to be abandoned in the future.

While it is apparent that for safety reasons a bicycle/pedestrian trail alignment could not be located within the operational portion of the ROW needed for the BART tracks and associated infrastructure, as noted above, some portion of the alignment could be utilized for a trail, especially where there is a wider corridor, such as Auto Mall Parkway to Grimmer, (Segment 4), or in the vicinity of Warren Avenue, where there is a City-owned parcel (Segment 5).

Areas owned or utilized by BART that could be considered for possible trail extensions include:

- Utility easements outside the area needed for trains, equipment, safety fencing or other infrastructure;
- Shared access and service roads parallel to the alignment
- Drainage channels adjacent to ROW
- Landscape buffers or parking areas adjacent to ROW
- Minor shift of BART trackage alignment to the west, where a sufficient buffer area between the BART and rail is maintained (generally, 25 feet from the rail track centerline to adjacent uses)

In some areas, acquiring additional ROW (outside BART lands and adjoining easements) would be needed where equipment, alignment or separation between the trains and UPRR is insufficient to accommodate a trail.

From a regional perspective, the heavily-used East Bay Greenway trail is located within and along the BART corridor in El Cerrito, Albany and Berkeley, and a ten-mile extension is currently being planned as part of the BART seismic retrofit project through Oakland to Fremont by the nonprofit group Urban Ecology, in cooperation with BART (http://urbanecology.org/current.htm). Although that segment includes elevated sections, where a trail at-grade is easier to implement, it is conceivable that there are areas within the study ROW where trail options could be explored along active BART tracks.

Completion of a continuous trail along the UPRR/BART alignment would represent a significant trail system opportunity in the East Bay, and would be consistent with local and regional plans and policies to support alternate transit modes. However, it is unlikely that these segments can be completed unless there is significant community support for their implementation and a commitment is made by BART to maximize trail accommodation in ongoing planning and design.

Although somewhat problematic, the City of Fremont should continue to provide input to BART regarding the BART extension to ensure that pedestrian and bicycle connections along the alignment and to BART stations are incorporated into the design where feasible. Likewise, if multiple trackage for rail use is discontinued within these segments, then trail feasibility should be revisited.

Alameda County Flood Control Channel Trail. Parallel to Segment 4, from (approximately) Washington Boulevard to Auto Mall Parkway, there is an opportunity to create a Class I trail along existing ACFCWCD channels and service roads. This could be considered as an alternate or interim alignment until issues with BART implementation are resolved. In some portions of the channel alignment (such as the channel adjacent to Fremont Boulevard, or the segment between Haven and Ronald Court), there is sufficient area to incorporate a Class I segment, with opportunities to restore and enhance the creek. In other areas (north of Carol Avenue to downtown Irvington), property ownership and existing infrastructure make trail implementation much more problematic. Enhancing and improving these creek areas as an amenity of the Irvington District was identified as a component of the Irvington Concept Plan, and trail connections should be incorporated into redevelopment plans where possible. This trail segment should be further explored and implemented either as an interim alternative to the UPRR Trail, or considered independently as a component of Irvington redevelopment and urban renewal, or creek restoration.

Private Land Acquisition. On the west side of the UPRR alignment, from north of Blacow Road to south of Grimmer School, there are several very narrow, linear alignments that parallel the trail route. These parcels, under private ownership, are typically ten-foot wide corridors that are generally undeveloped and could be utilized to provide local, parallel trail segments. This would require successful negotiation with each individual property owner. However, it should be noted that virtually all of the individual property owners who have acquired these small parcels would need to cooperate in order for this to be feasible.

Other opportunities for trail implementation occur in limited areas on the east side of the ROW at the City's Corporation Yard (south of Blacow), or associated with future redevelopment of lands along Osgood Road and further south, along Warm Springs Boulevard In the lower Warm Springs Boulevard area, there may be opportunities to obtain ROW for the trail by reconfiguring parking lots and landscape strips that directly abut the BART alignment by reconfiguring the parking lot striping and landscaping to better utilize these areas, especially as some of these business parks are redeveloped or are remodeled.

Finally, it should be recognized that some lands within the study area will be redeveloped in the future. This includes the conversion of office parks and industrial sites west of Warm Springs Road to residential or multi-use developments, as well as the potential distant future redevelopment of the NUMMI or other large industrial sites to commercial or residential uses. Should such redevelopment occur, then trail alignment and connections should be completed as part of the redevelopment process to ensure a continuous trail connection.

Key Issues for a Trail South Of Washington Boulevard. Implementation of a trail along the BART alignment south of Washington Boulevard will be dependent on the final design of the BART alignment, as well as on creative use of excess ROW, utility easements, adjacent public ROW, Flood Control Agency maintenance roads along creek channels, and potential easement acquisition of select private lands, such as portions of unused lands and unneeded parking areas. In particular, for narrow sections within the BART ROW it is possible that a bypass bike lane/trail off the UPRR/BART Corridor might be needed in key areas. For example, south of the S. Grimmer Boulevard BART Station, the trail corridor could divert to Old Warm Springs Court and connect to Warm Springs Boulevard. The trail would continue south along Warm Springs Boulevard and re-connect to the BART corridor south of Mission Boulevard at one of the spur trails. Design of specific alignments to accommodate BART and an adjacent multi-use trail will be dependent on BART's final alignment, as well as on easement acquisition opportunities.

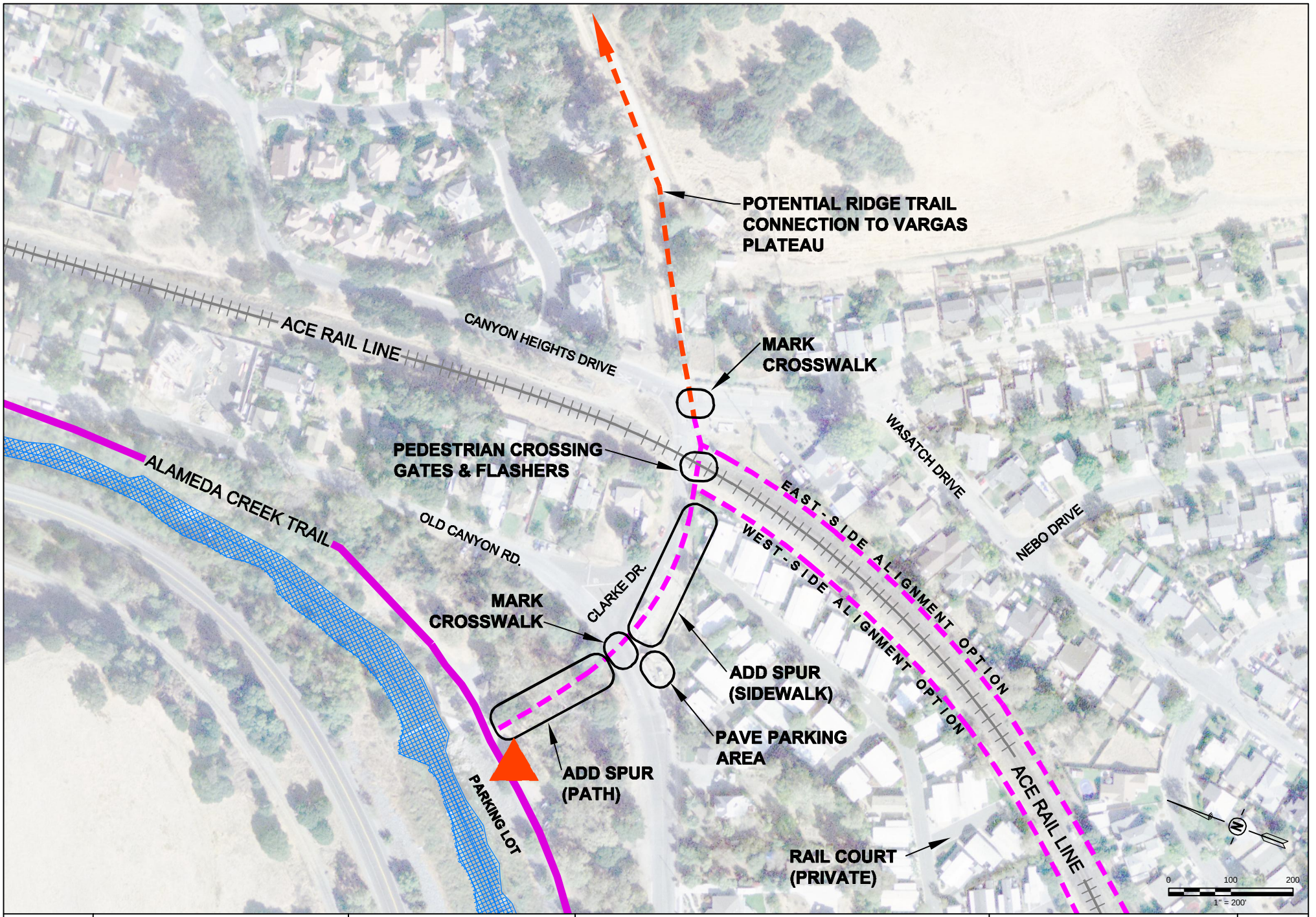
Some of the private lands in the area south of Washington Boulevard may be undergoing redevelopment or facility upgrades in the near future, including the conversion of industrial/commercial property to mixed-use and high-density residential property. The City will need to proactively work on reservation of easement opportunities for these lands to ensure that future redevelopment efforts facilitate and do not preclude trail construction opportunities. This will require close cooperation among the City's current and advanced planning and transportation engineering staff to consider and review trail alignment opportunities as part of project development.

Continued cooperation with BART and VTA planning and engineering staff will also be needed to make the trail south of Washington Boulevard a reality. Since BART in this area is proceeding with ROW acquisition, as well as preliminary to intermediate engineering design, there is some urgency in making sure that planning decisions within BART and VTA consider opportunities for the trail. Fremont city leaders and representatives of regional transportation planning boards, as well as BART representatives, should continue their efforts to include the trail as part of planning, design, budgeting, and scheduling of BART implementation efforts. An informational presentation to the BART/VTA Boards may be appropriate as part of the planning process.

5. Safety and Intersection Analysis

This section discusses trail intersections with existing roads, paths and rail crossings, with a discussion of existing intersection conditions, trail context and proposed safety and design improvements. Included are individual plan sheets for each intersection or key area that provide design guidelines and recommendations.

Area	**1.1**
Site	**Clarke Drive / Old Canyon Road / Canyon Heights Drive**
Existing Conditions	Clarke Drive crosses the active UPRR corridor at-grade between Old Canyon Road and Canyon Heights Drive. Just to the east, Canyon Heights Drive runs between Niles Canyon to Morrison Canyon Road. The Vargas Plateau, a future East Bay Regional Parks District (EBRPD) facility, lies atop the hills to the east. The Bay Area Ridge Trail would run through Vargas Plateau. At the intersection of Clarke Drive and Canyon Heights Drive there is a corridor that leads up the hill to the Plateau. Alameda Creek and the Alameda Creek Trail are just to the west, with a paved parking lot among the trees between Old Canyon Road and the creek. Just west along Old Canyon Road is the Niles Canyon Mobile Estates mobile home park. The area east of the railroad is single-family residential.
Trail Context	Clarke Drive is one of two proposed north-end terminii for the Trail. From the Clarke grade crossing the Trail would proceed south along the east or west side of active rail line to the “Triangle” area. .
Proposed Improvements	1. Connect rail grade crossing to Alameda Creek Trail parking / staging area` • 10’ wide sidewalk • Crosswalk markings and signage at Old Canyon Road • Path from Old Canyon Road through trees down to parking lot at Alameda Creek 2. Connect rail grade crossing to Canyon Heights Drive intersection • 10’ wide sidewalk 3. Improve the unpaved area at southeast corner of Old Canyon Road / Clarke Drive intersection for use as second parking/staging area. 4. Connect Canyon Heights Drive to Vargas Plateau • Unpaved trail (grade exceeds ADA slope) • Crosswalk markings and signage at Canyon Heights Drive



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CORRIDOR VIEW PROPOSED TRAIL

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FREMONT, CA

EXISTING	PROPOSED			
		TRAIL AND SPURS		POTENTIAL TRAIL
		SIDEWALK		BART
		BIKE LANE		WATERWAY
		RAILROAD TRACKS		IMPROVEMENT AREAS

CLARKE DRIVE TERMINUS - INTERSECTION DETAILS

AREA
1.1

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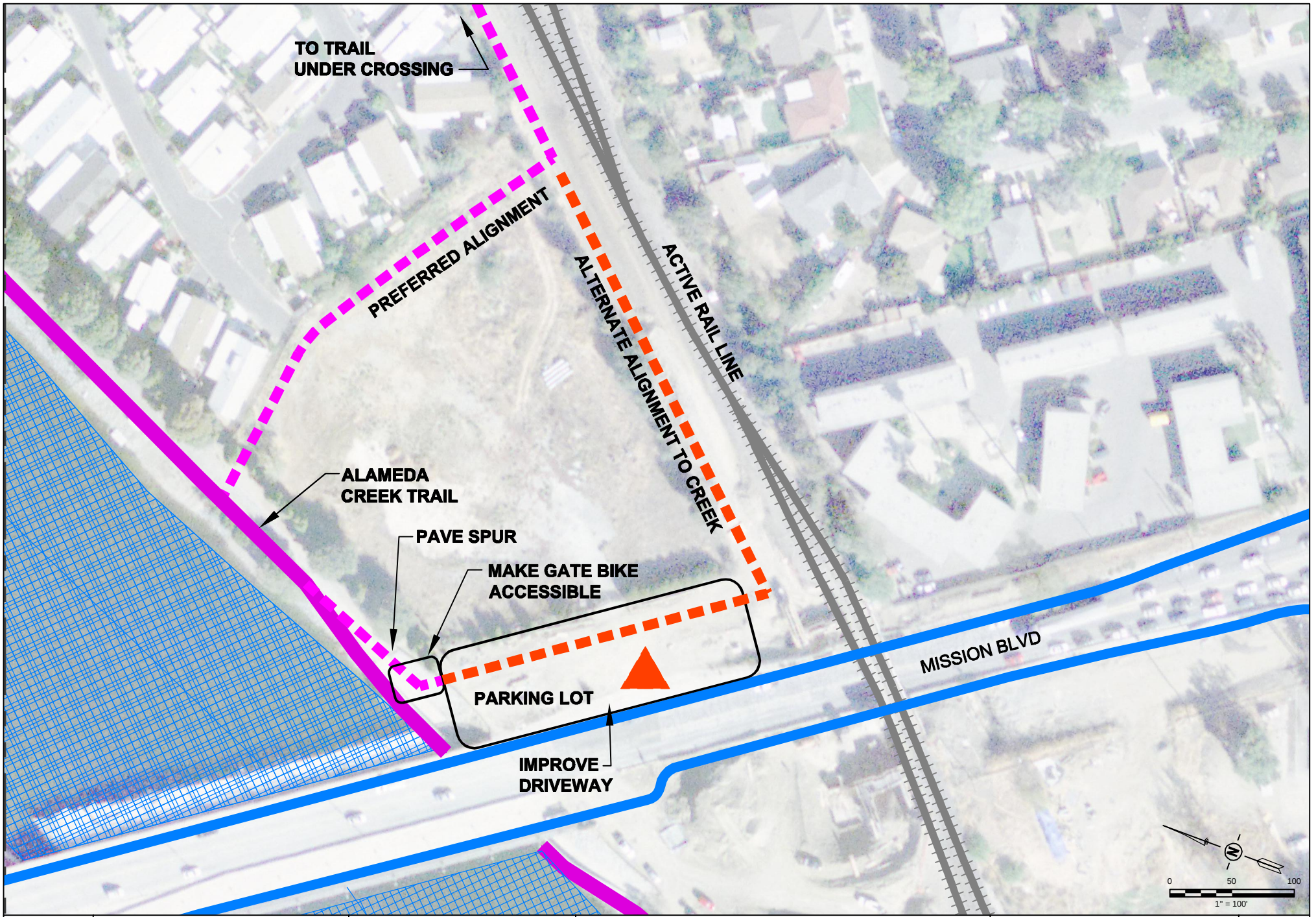
Area	**1.3**
Site	**Alameda Creek Trail and Mission Boulevard link to "Triangle" area**
Existing Conditions	Between Clarke Drive and Mission Boulevard the active UPRR line is parallel to Alameda Creek on a 10-20 ft. tall embankment and crosses over Mission Boulevard on a trestle. The Alameda Creek Trail runs along the south side of Alameda Creek and crosses under Mission Boulevard. Niles Canyon Mobile Estates, a senior residential development, is between the railroad and the creek. Between the south fence of the mobile home park and the railroad embankment is an unpaved service road suitable for trail development. There is an undeveloped parcel (owned by Alameda County Water District) between Mission Boulevard and the west fence of the mobile home park, where an internal street ends. On the east side of Mission Blvd. between the trestle and the Alameda Creek Trail is an unpaved parking area with a driveway on Mission Boulevard and a gate restricting vehicular access to the trail.
Trail Context	The second northern access point to the UPRR Corridor Trail would be on the Alameda Creek Trail between Mission Boulevard and the west edge of Niles Canyon Mobile Estates.
Proposed Improvements	1. Connect UPRR Corridor Trail to Alameda Creek Trail • Align UPRR Trail along west perimeter of mobile home park • Connect trail to internal street of MHP (if desired by residents) • Design the trail-trail intersection as the junction of two major trails. Post guide signage to major destinations such as Lake Elizabeth / Central Park and the Irvington BART station, with distances. 2. Improve parking area on Mission Boulevard for trail use • Pave parking area • Modify the trail gate to admit walkers and bicyclists 3. Connect parking area directly to UPRR Trail behind mobile home park • Provide a spur trail at the foot of the railroad embankment on the north side, between Mission Boulevard and the corner of Niles Canyon Mobile Estates. In addition to the parking lot, this will also serve walkers and bicyclists who originate on Mission Boulevard south of the railroad line.



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EXISTING	PROPOSED			
		TRAIL AND SPURS		POTENTIAL TRAIL
		SIDEWALK		BART
		BIKE LANE		WATERWAY
		RAILROAD TRACKS		IMPROVEMENT AREAS

TRAIL TERMINUS AT MISSION BLVD

AREA
1.3

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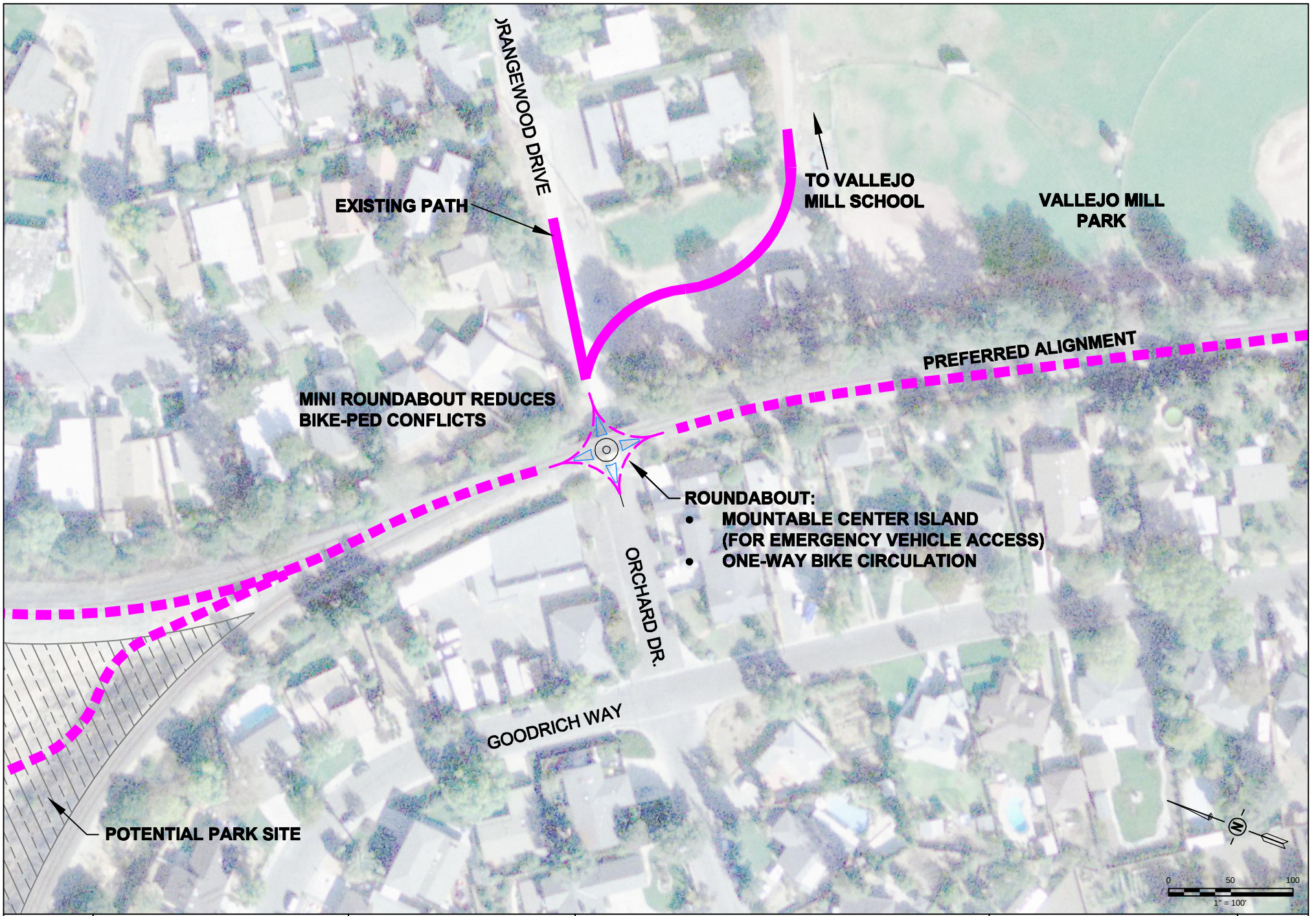
Area	**1.4**
Site	**Orchard Drive / Orangewood Drive trail crossing**
Existing Conditions	An abandoned street connects Orchard Drive to Orangewood Drive. There is a connection to Vallejo Mill Park and to Vallejo Mill School beyond. To the north is the "Triangle" area formed by the active rail line and two inactive branches. The rails and ties have been removed from the inactive branches, including the trestle and the corridor to the south, but the raised embankment at trestle height remains.
Trail Context	Orchard Drive / Orangewood is the first public access point south of the Triangle. Local recreational walkers will use this access as part of "loop" routes to adjacent access points (Clarke Drive, Pickering Avenue). The Triangle is an opportunity to reuse fill from the railroad embankment on this segment, to create a new public open space.
Proposed Improvements	1. Remove the railroad embankment • Remove the embankment to lower the trail to street grade • Fill the Triangle area with the soil from the embankment, while ideally keeping the Triangle close to the grade of backyards that front on it 2. Design the intersection to minimize bicycle-involved collisions and severity. • Consider using a modern roundabout design with a diameter determined by bicycle speeds of 15 mph, to reduce the likelihood of head-on and broadside collisions and to also create a recognizable slow point and neighborhood focal point. Most bicyclists will circulate counterclockwise as intended, though walkers will not • Make the roundabout's center island mountable to accommodate emergency vehicle access between Orange Drive and Orangewood. 3. Pave a trail from the Orangewood side to Vallejo Mills School



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EXISTING	PROPOSED			
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		SIDEWALK		BART
		BIKE LANE		WATERWAY
		RAILROAD TRACKS		IMPROVEMENT AREAS

ORCHARD DRIVE TRAIL DETAIL

AREA 1.4

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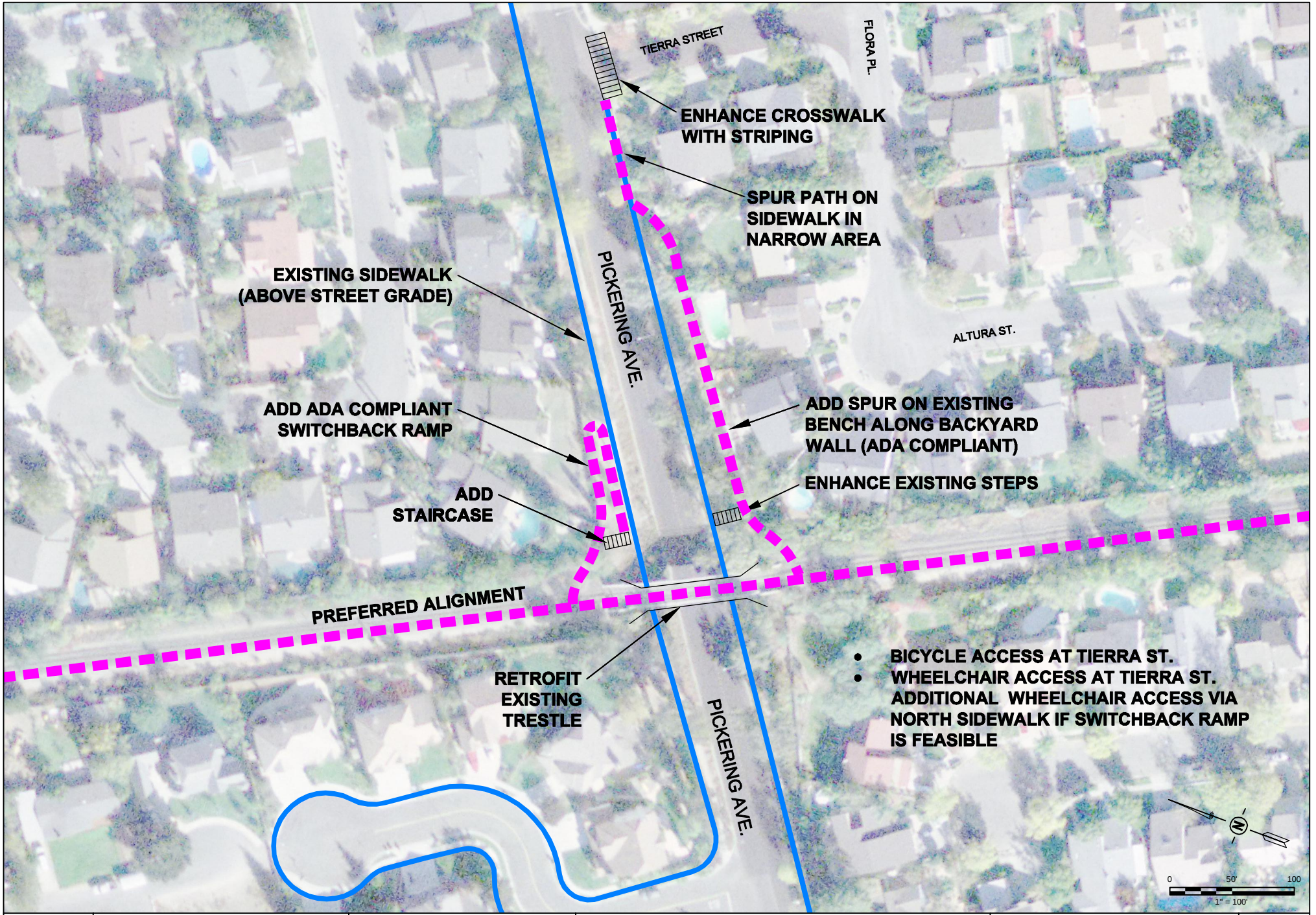
Area	**1.5**
Site	Pickering Avenue overcrossing
Existing Conditions	The railroad corridor crosses over Pickering Avenue on a concrete trestle. Pickering is depressed between Tierra Street and Pickering Court, and its sidewalks are elevated above street grade. There is a level embankment or "bench" from the corner house lot at Tierra Street to the south side of the trestle. Rails and ties have been removed on this segment but ballast remains on the trestle and its approaches.
Trail Context	This is the second public access point south of the Triangle area. The trestle will remain (with a retrofitted railing), but railroad ballast will be removed to lower the trail to the trestle surface. Bicycle and ADA access can be provided at Tierra Street using the bench that runs along the backyards of houses fronting on Flora Place. Non-ADA pedestrian access can be provided on the northeast quadrant using a staircase to the Pickering sidewalk below, and possibly also a switchback ramp to provide a second ADA access that does not require crossing Pickering. An existing steep staircase at the southeast quadrant can be improved to provide additional non-ADA access from the south sidewalk.
Proposed Improvements	1. Add a trail spur from the south end of the trestle to Tierra Street • Make it 10' wide on the "bench" segment • At Tierra Street it may have to be shared with the sidewalk due to the corner house lot. If so, widen that short sidewalk segment if possible. • Mark the crosswalk across Tierra Street. • Consider also marking an uncontrolled crosswalk across Pickering Avenue to the west corner of Tierra Street. 2. Improve the existing staircase from the south sidewalk to the trestle 3. Add a staircase from the north sidewalk to the north end of the trestle 4. If possible, add an ADA-compliant switchback ramp from the north sidewalk to the north end of the trestle



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CORRIDOR VIEW PROPOSED TRAIL

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EXISTING	PROPOSED			
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		SIDEWALK		BART
		BIKE LANE		WATERWAY
		RAILROAD TRACKS		IMPROVEMENT AREAS

PICKERING AVE TRAIL DETAIL

AREA 1.5

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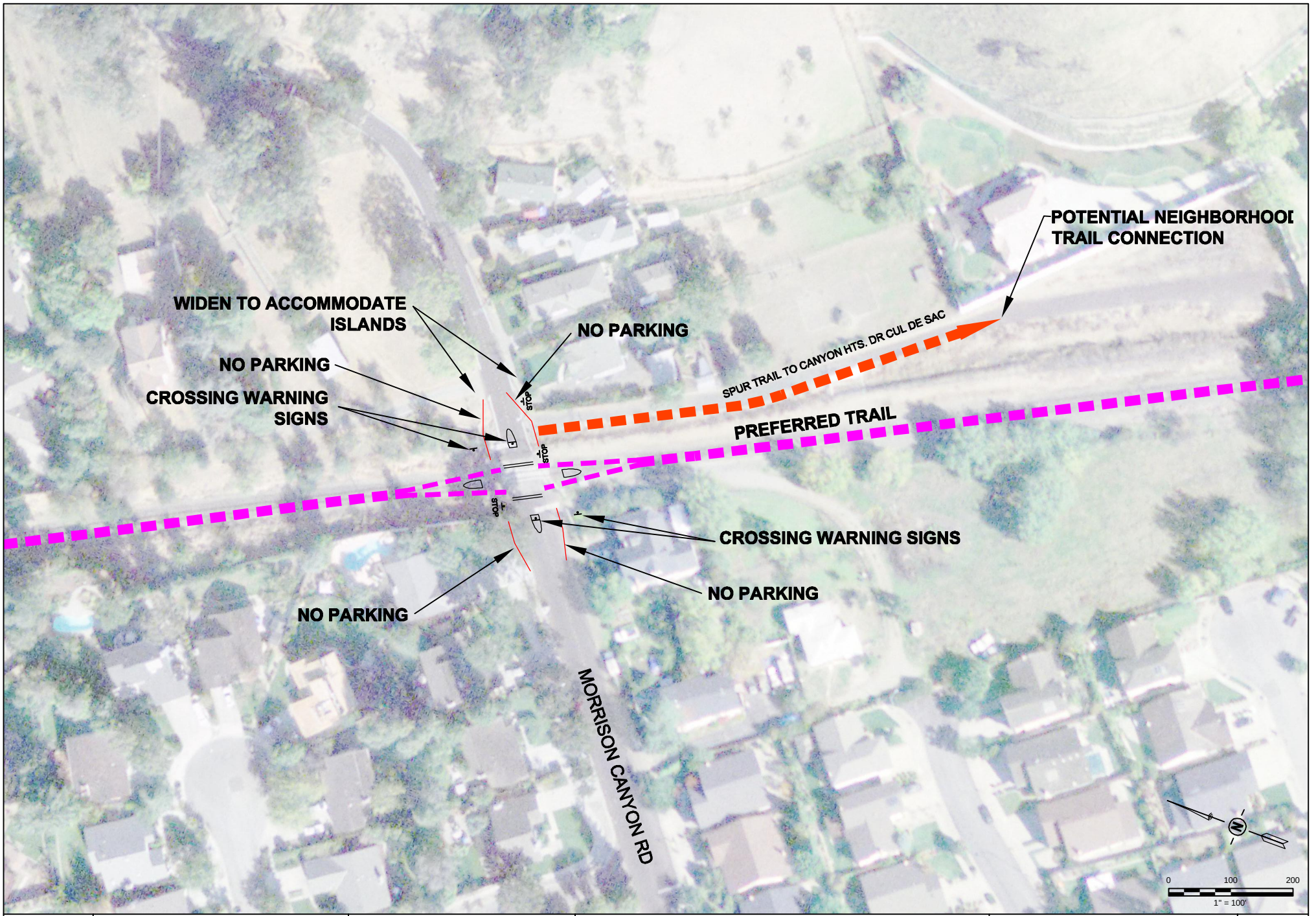
Area	**1.6**
Site	**Morrison Canyon Road (overview)**
Existing Conditions	At the UPRR corridor, Morrison Canyon Road transitions from a wide suburban street with curb, gutter, parking, and closely spaced house lots, to a narrow rural roadway with infrequent houses and driveways, no curb, gutter, or parking. The rail corridor crosses at grade, with no ballast to be removed. Immediately to the south there is an ACFCWCD parcel on the east side between Morrison Canyon Road and the walled cul-de-sac of the southern segment of Canyon Heights Drive. There is a locked gate in that wall for maintenance vehicle access to the ACFCWCD area. East of the rail crossing, Canyon Heights Drive continues north toward Clarke Drive along the foot of the eastern hills.
Trail Context	Safety of the crossing would be improved by making it more recognizable to motorists, and by providing a median refuge. Trail users should stop for roadway users at this location, and this could be encouraged by "wow"-ing the trail at the roadway, possibly around trail median islands. Access could be provided from the Canyon Heights Drive neighborhood to the south by modifying the existing gate in the cul-de-sac wall that provides maintenance vehicle access to the ACFCWCD area, if desired by residents.
Proposed Improvements	1. Create a median refuge crossing • Widen the east leg of the street and add a median island • Add a median island on the west (suburban) leg • Widen the trail as it meets the roadway, and add median islands on it • Post STOP signs and add stop bars on the trail approaches • Add advance yield lines and signage on the roadway approaches 2. Provide a spur trail to the Canyon Heights Drive cul-de-sac to the south • Pave a 10' wide trail from Morrison Canyon Road east of the ACFCWCD channel, to the existing gate in the cul-de-sac wall • Modify the cul-de-sac gate to enable bicycle and pedestrian access • At Morrision Canyon Rd., place a STOP sign and stop bar on the spur • Along the south end of the spur, provide a bridge across the ACFCWCD channel to the mainline Trail 3. Improve the ACFCWCD area along the spur as a resting place 4. Explore the feasibility of access from the ACFCWCD area up the hill to the east



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CORRIDOR VIEW
PROPOSED TRAIL

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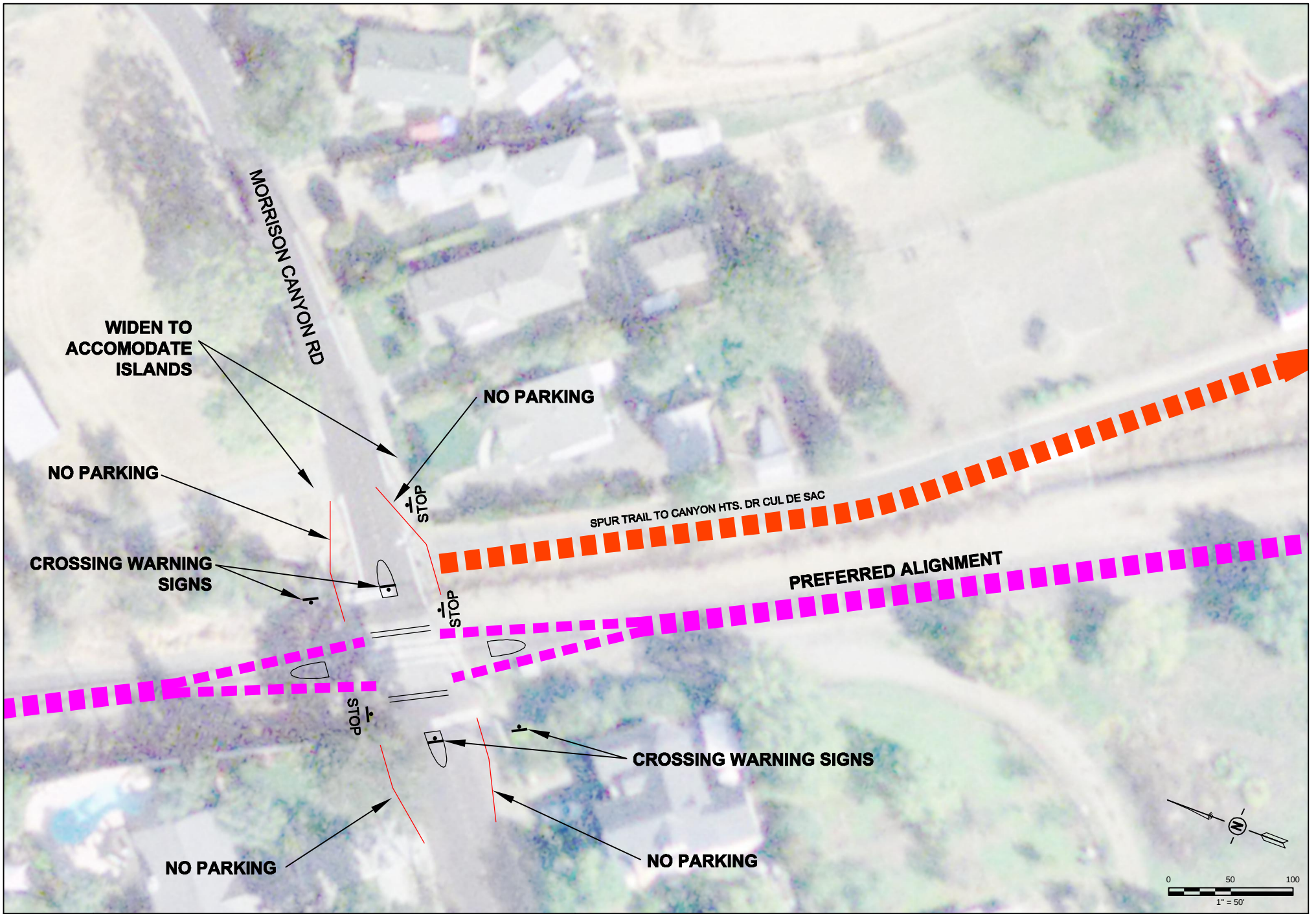
EXISTING	PROPOSED			
		TRAIL AND SPURS		POTENTIAL TRAIL
		SIDEWALK		BART
		BIKE LANE		WATERWAY
		RAILROAD TRACKS		IMPROVEMENT AREAS

MORRISON CANYON RD

AREA
1.6

PLOT BY: BARRY J. VANDERENT DATE: 5/26/2010 SCALE: 9/128" = 1' FILE: P:\2005\250234_FREMONT_UPRR_CORRIDOR_TRAIL\CAD\FREMONT_PROPOSED_TRAIL.DWG PAGE SETUP: ---- PENSTYLES: ----

Area	**1.6**
Site	Morrison Canyon Road (detail)
Existing Conditions	See previous page for overview description.
Trail Context	See previous page for overview description.
Proposed Improvements	See previous page for overview description. 1. Provide median islands on the roadway and optionally on the mainline trail as shown. This will require widening the east (rural) leg of the roadway. 2. Enhance the crossing with markings across the roadway 3. Provide crossing warning signs on the roadway approaches. 4. Provide STOP signs and stop bars on both mainline trail approaches, and on the spur trail approach east of the ACFCWCD channel. 5. Pave the aprons of any nearby rural driveways back 15 feet from the roadway edge, to reduce gravel migration onto the roadway. 6. Prohibit parking near the mainline and spur trail crossings.



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CORRIDOR VIEW PROPOSED TRAIL

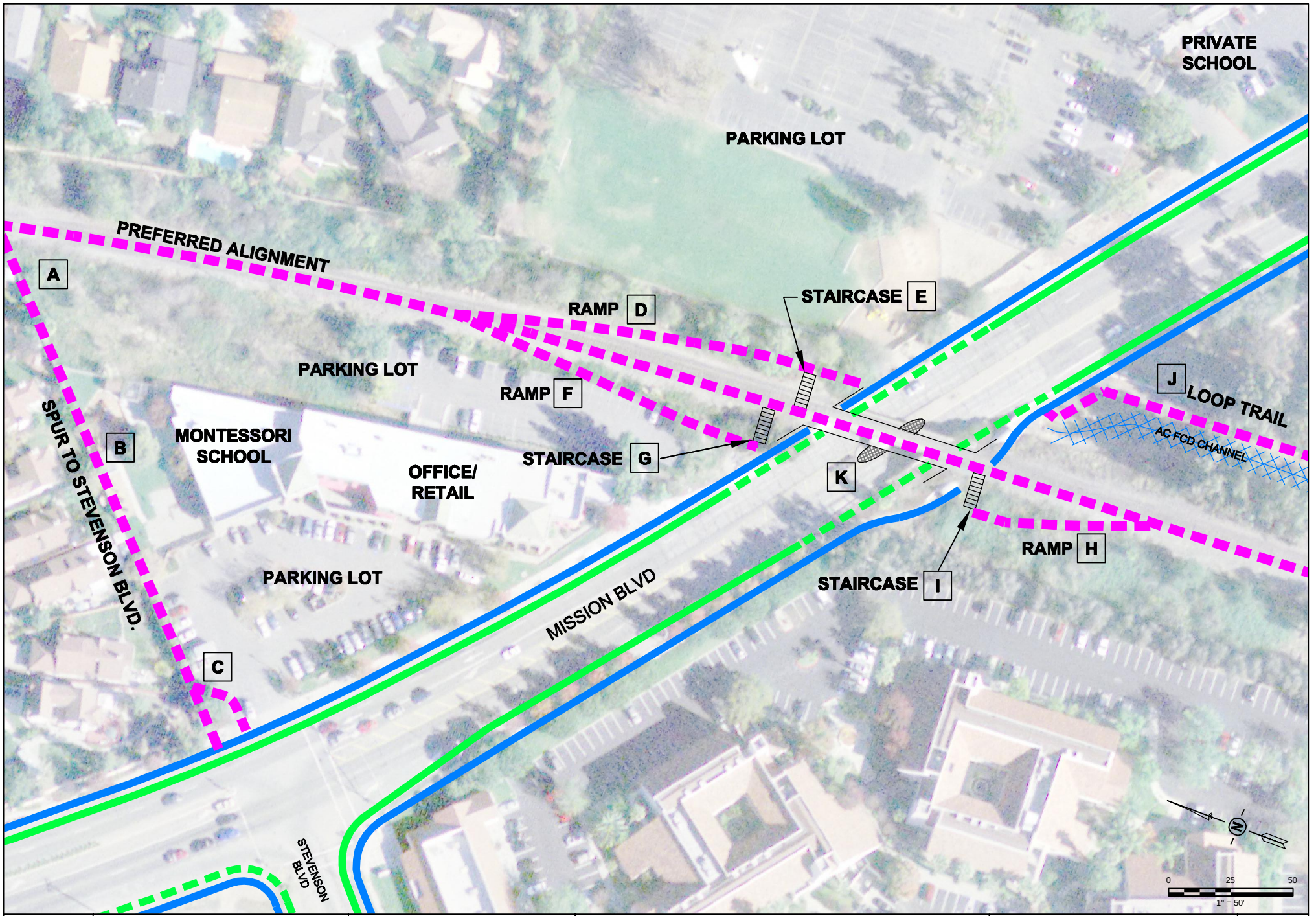
UNION PACIFIC RAILROAD
FREMONT, CA

EXISTING	PROPOSED			
		TRAIL AND SPURS		POTENTIAL TRAIL
		SIDEWALK		BART
		BIKE LANE		WATERWAY
		RAILROAD TRACKS		IMPROVEMENT AREAS

MORRISON CANYON RD TRAIL DETAIL

AREA
1.6

Area	**1.7**
Site	**Mission Boulevard (north crossing) and Stevenson Boulevard**
Existing Conditions	The UPRR corridor crosses Mission Boulevard on a railroad bridge supported by a large pillar in the median of the roadway. It runs on a high embankment to either side of the bridge. Stevenson Boulevard, which has bike lanes, intersects Mission at a signal just north of the railroad bridge. Mission Boulevard has bike lanes except for a significant gap near the bridge pillar. The triangular parcel between the rail corridor, Mission, and the extension of Stevenson the backyard fence line of adjacent homes) is occupied by a retail and office building with a rear parking lot along the rail embankment and a Montessori School at the north end. Parcel maps show an easement along the north end between the rail corridor and the Stevenson signal. An ACFCWCD channel runs along the east side of the railroad embankment south of Mission, with an unpaved service road along its east side, along the backyard fences of homes to the east.
Trail Context	This is the major access point north of Central Park. The Pacific School for the Deaf is a short distance west on Stevenson Boulevard.
Proposed Improvements	1. Add a spur path directly to Stevenson Boulevard [A, B, C] along the residential / commercial parcel boundary. This may require a land swap involving the vacant area near the railroad corridor in this vicinity, to enable relocation of some of the Montessori School's uses such as its playground. 2. Where the spur approaches Stevenson, provide bike access into the parking lot [C] to enable bicyclists to approach the signal via the driveway. 3. Add ADA-compliant ramps to the Trail on the northeast [D], southwest [H], and (if feasible) the northwest [F] quadrants of the bridge, connecting to Mission Boulevard sidewalks and bike lanes. The northwest-quadrant ramp [F] should have access into the rear parking lot of the office building. 4. Add staircases near the feet of the ramps described above [L, I, G]. 6. Pave a spur trail on the service road east of the ACFCWCD channel south of Mission Boulevard [J]. Modify the fence at Mission Boulevard to provide direct access to the south sidewalk and adjacent bike lane. 7.Optionally, replace the rail bridge with a clear-span trail bridge, removing the old center pillar [K] and closing the bike lane gaps on Mission Boulevard.



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CORRIDOR VIEW PROPOSED TRAIL

UNION PACIFIC RAILROAD
FREMONT, CA

EXISTING	PROPOSED			
		TRAIL AND SPURS		POTENTIAL TRAIL
		SIDEWALK		BART
		BIKE LANE		WATERWAY
		RAILROAD TRACKS		IMPROVEMENT AREAS

MISSION BLVD/ STEVENSON BLVD JUNCTION

AREA
1.7

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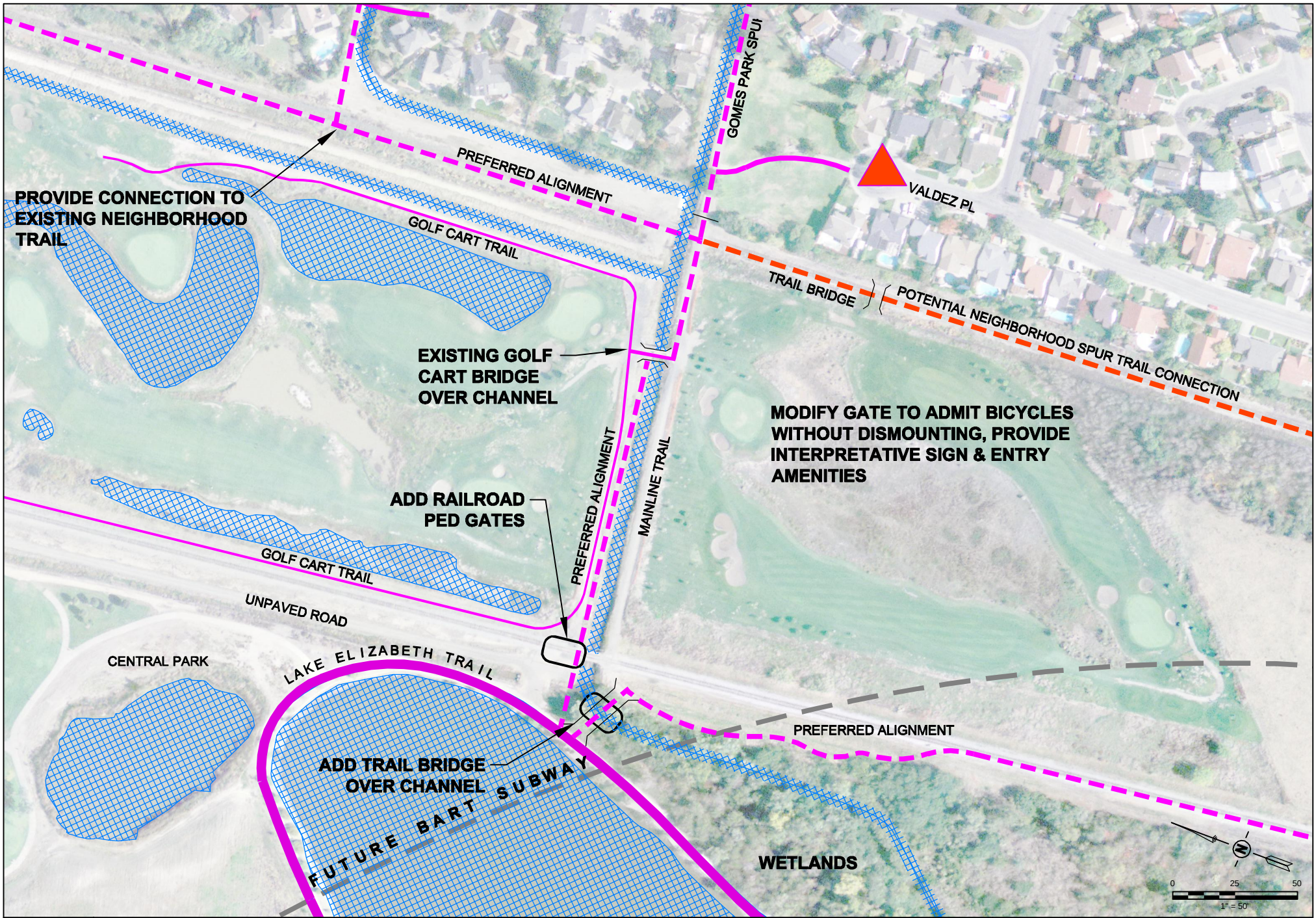
Area	**2.1 and 2.2**
Site	**North Crossover / Gomes Park / Central Park**
Existing Conditions	At the ACFCWCD channel running east-west at Gomes Park, the abandoned UPRR line occupies the east side of the wide railroad corridor with the railroad bridge trestle removed (over Mission Creek channel), and the active UPRR line occupies the west side. Between the two is the Golf Course. Channels run along the east and west sides of the wide corridor, and also across the corridor at this point. There is a path bridge across the east-west channel for use by golfers, golf carts, and golf course maintenance vehicles. Private (ACFCWCD) access to the maintenance roadway to the east, toward Gomes Park, is gated but walkers can go around the end of the gate. To the west is Lake Elizabeth, with a wide concrete perimeter path well-used by walkers. That path connects to the golf course by an unpaved spur and an unimproved private (ACFCWCD) grade crossing of the single-track active rail line. BART will tunnel under Lake Elizabeth and will daylight (return to surface) to the south of this area.
Trail Context	The UPRR Trail would switch from the east side to the west side at this point, to avoid the future BART line to the south. A paved link to the Lake Elizabeth perimeter path is needed, with an improved rail crossing either at-grade (with gate arms and signals) or a trail tunnel (which may not be feasible due to hydrology and wetlands, and the need to connect to Lake Elizabeth). The Trail would continue south along the west side of the active rail line, between the track and the tree-covered wetlands along the east side of Lake Elizabeth.
Proposed Improvements	1. Pave the Trail to the north and south, and across the rail ROW on the sides of the ACFCWCD cross-channel (see figure). 1a. The City will work with ACFCWCD to establish a public trail along Mission Creek levees connecting Gomes Park and Central Park. 2. Improve the trail crossing of the active UPRR line, either at-grade (with pedestrian gate arms and flashing light signals) or with a trail tunnel. The City will work cooperatively with ACFCWCD, UPRR, and CPUC in the establishment of a public pedestrian at-grade railroad crossing. 3. If an at-grade crossing is chosen, also add gate arms to control crossings to the golf cart trail along the north side of the ACFCWCD cross-channel. 4. Pave a spur trail on the unpaved service road running east to Gomes Park. 5. Modify the gate on the Gomes Park spur to enable through access by bicyclists without dismounting. 6. Add signs at the golf cart crossing bridge over the ACFCWCD cross-channel, to warn trail users and golf cart bridge users about the trail traffic. 7. Construct trail bridge across Mission Creek channel.



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CORRIDOR VIEW PROPOSED TRAIL

UNION PACIFIC RAILROAD
FREMONT, CA

EXISTING	PROPOSED			
		TRAIL AND SPURS		POTENTIAL TRAIL
		SIDEWALK		BART
		BIKE LANE		WATERWAY
		RAILROAD TRACKS		IMPROVEMENT AREAS

NORTH CROSSOVER

AREA 2.1

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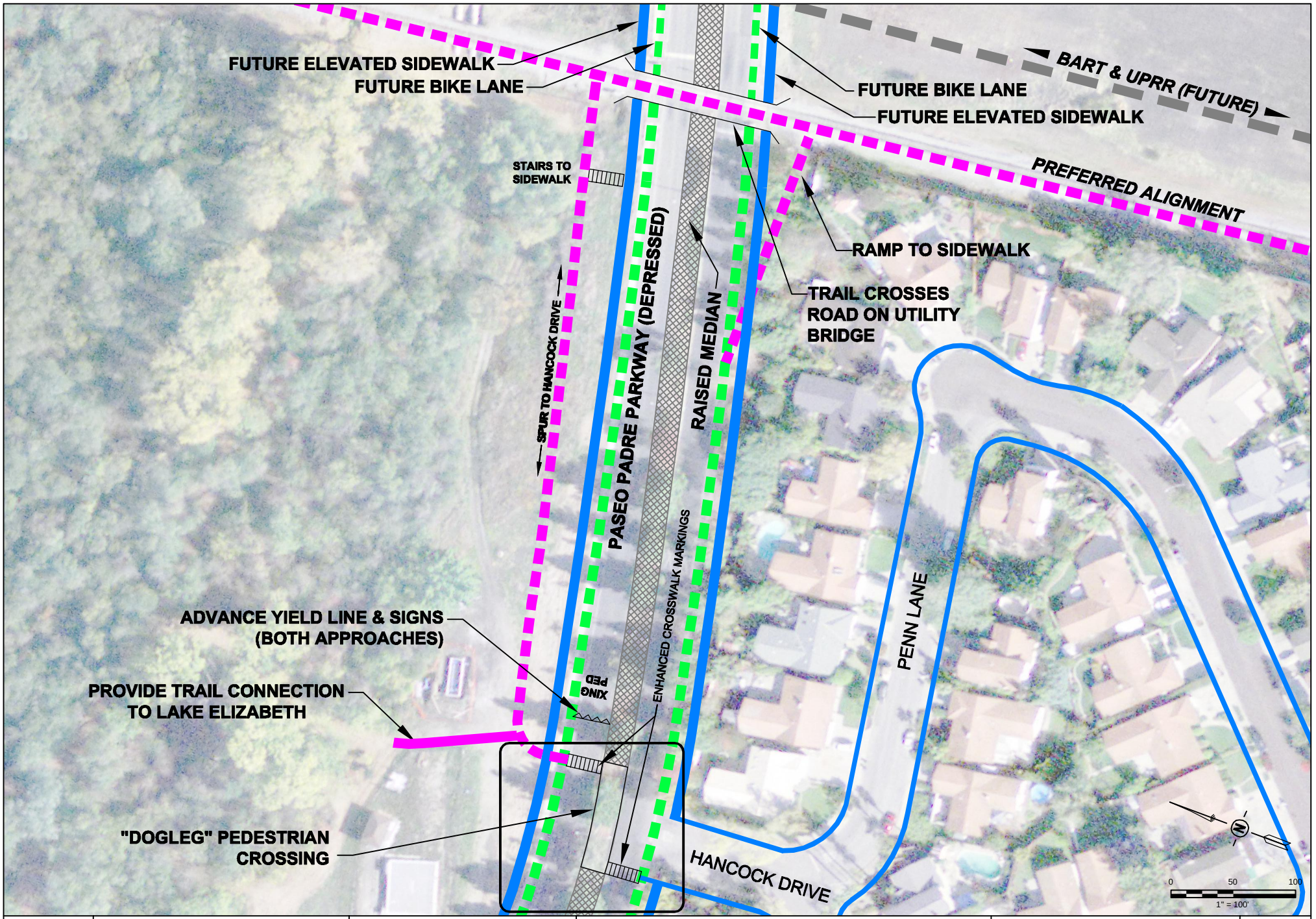
Area	**3.1**
Site	**Paseo Padre Parkway**
Existing Conditions	Currently Paseo Padre Parkway is at-grade and the active UPRR line runs along the west side of a very wide (500') rail corridor, where the figure shows the future mainline trail, with a gate arm equipped crossing. Hancock Drive intersects Paseo Padre from the south approximately 750' to the west, with no access across the median. Grimmer Boulevard and the public entrance to Central Park / Lake Elizabeth are further to the west. Single-family residential residences back up to the rail corridor on the east and west side south of Paseo Padre.
Trail Context	Paseo Padre Parkway will be depressed below a relocated active UPRR line and the future at-grade BART line, both aligned to the east of the current rail. It will have sidewalks and bike lanes. A utility bridge will span Paseo Padre at the location shown, and will be wide enough to carry the trail. The trail bridge should be connected to the roadway sidewalks and bike lanes.
Proposed Improvements	1. Provide a spur trail from the north side of the trail bridge to Hancock Drive. 2. Provide a median refuge crossing from Hancock Drive to the north side of Paseo Padre. Consider using a "dogleg" design as shown, to force bicyclists and walkers to look at oncoming traffic rather than crossing without yielding. 3. Provide a spur path to the south sidewalk between the trail bridge and Hancock Drive, also connecting to the south side (eastbound) bike lane. 4. Provide staircases on the west side of the trail bridge, to the north and south sidewalks.



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CORRIDOR VIEW PROPOSED TRAIL

UNION PACIFIC RAILROAD
FREMONT, CA

EXISTING	PROPOSED			
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		SIDEWALK		BART
		BIKE LANE		WATERWAY
		RAILROAD TRACKS		IMPROVEMENT AREAS

PASEO PADRE PARKWAY

AREA 3.1

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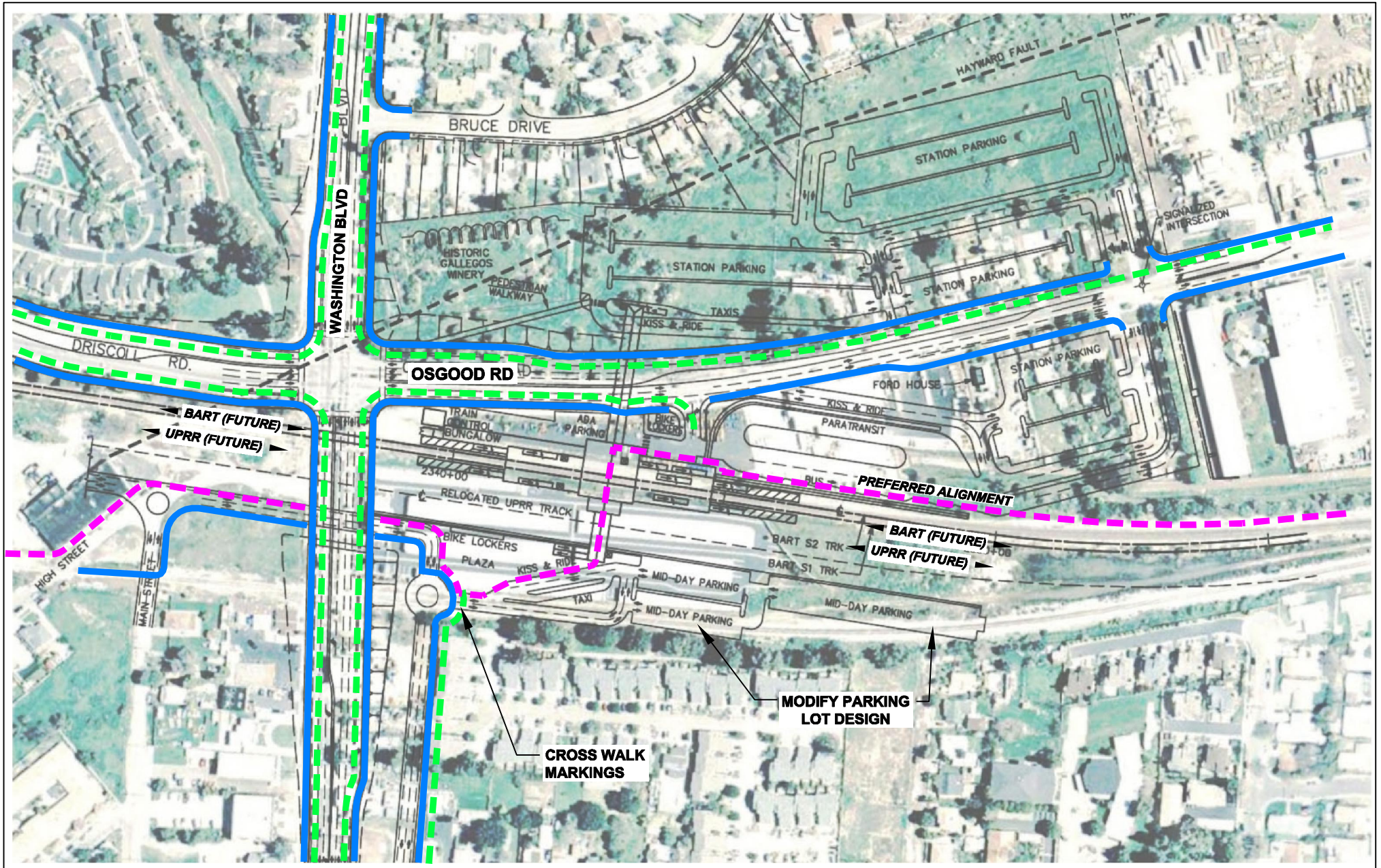
Area	**4.1**
Site	**Irvington BART station / Washington Boulevard**
Existing Conditions	The rail corridor is approximately 200' wide at this point. The active UPRR line runs along the west edge. Washington Boulevard currently crosses at grade, with gated signals and an at-grade traffic signal at Driscoll Road / Osgood Road just to the east. Main and High Streets, a short distance north of Washington, also cross the active rail at-grade with gated signals.
Trail Context	The active UPRR line will shift to the center of the corridor, with future BART on the east side. The Irvington BART station will be on just south of Washington, with parking lots on both sides of Osgood Road. The current west-side UPRR alignment will be abandoned for use by the Trail and as a maintenance and emergency access road. Washington will bridge over the corridor, with sidewalks and bike lanes. Osgood Road will have bike lanes. High and Main Street will be terminated on the west side, becoming part of the Irvington redevelopment, with mixed-use retail. Townhouses are planned on the west side of the corridor between the relocated active rail and former UPRR alignment (the new service road and Trail).
Proposed Improvements	1. Align the Trail along the west side of the rail corridor as follows: • North of High Street: on the former UPRR line (new service road). • Near High Street: through the new townhouse development to the west side of the relocated active UPRR line • Between High Street and the south side of the Washington bridge: along the west side of the relocated active UPRR line, i.e. on the east side of the local access road that connects under Washington. • At the BART station's west parking lot: Cross the entrance driveway on the south leg. Continue on the west side of the driveway, skirting the west perimeter of the parking lot. Adjust parking lot plans as needed to accommodate Trail. 2. If an east-side Trail alignment is desired south of Washington: • Cross over the active UPRR line and the BART tracks on a widened pedestrian overcrossing that will be part of the BART access from the west parking lot (not shown in figure). • Continue south along the front (east wall) of the BART station



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CORRIDOR VIEW PROPOSED TRAIL

UNION PACIFIC RAILROAD
FREMONT, CA

EXISTING	PROPOSED			
		TRAIL AND SPURS		POTENTIAL TRAIL
		SIDEWALK		BART
		BIKE LANE		WATERWAY
		RAILROAD TRACKS		IMPROVEMENT AREAS

IRVINGTON BART
WASHINGTON BLVD

AREA
4.1

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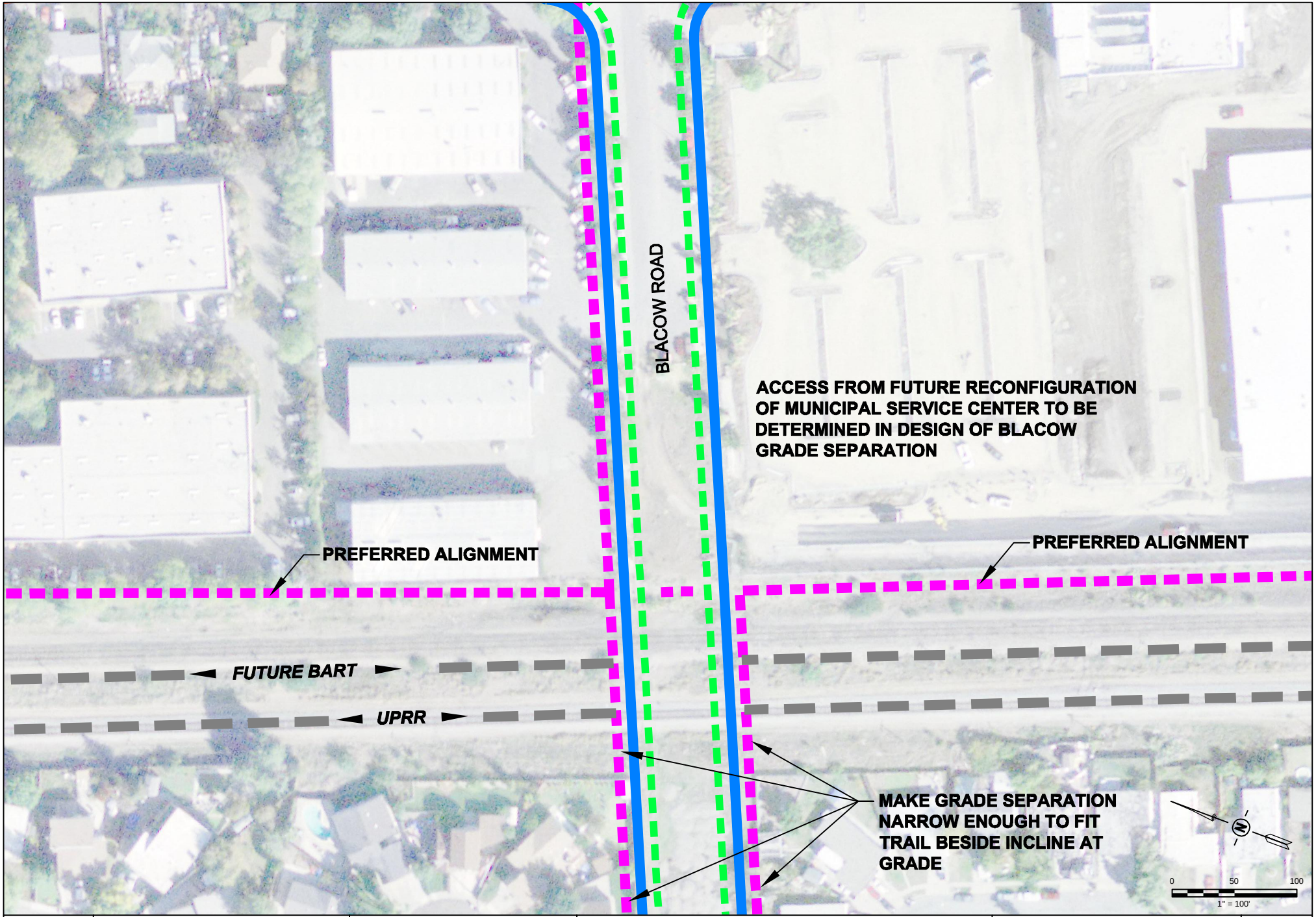
Area	4.2.1
Site	**Blacow Road – Future Roadway Overcrossing**
Existing Conditions	Blacow Road does not currently cross the railroad corridor. Through the residential area on the west side it has two lanes in each direction and a landscaped median. On the east side it is a four-lane street for the single block between the rail corridor and Osgood Road. The City of Fremont's Maintenance Services Center occupies the southeast quadrant of the crossing. Backyards of west-side homes are close to the rail corridor, constraining available width for a trail.
Trail Context	Blacow is a useful location for an overcrossing of the future BART line because it is roughly midway between Fremont Boulevard / Washington Boulevard and Auto Mall Parkway, the closest crossing opportunities to the north and south. Blacow is the closest arterial street parallel to and east of I-880, extending over four miles to Thornton Avenue.
Proposed Improvements	1. Provide sidewalks and bike lanes if Blacow Road overcrossing improvement occurs. 2. Connect Blacow's north and south sidewalks to the Trail east side. This may require designing the roadway overcrossing to reserve sufficient width beside it to accommodate path connectors. 3. Provide a direct access point into the Maintenance Services Center, on the east side of the corridor.



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CORRIDOR VIEW
PROPOSED TRAIL
UNION PACIFIC RAILROAD
FREMONT, CA

EXISTING	PROPOSED			
		TRAIL AND SPURS		POTENTIAL TRAIL
		SIDEWALK		BART
		BIKE LANE		WATERWAY
		RAILROAD TRACKS		IMPROVEMENT AREAS

BLACOW ROAD

AREA
4.2

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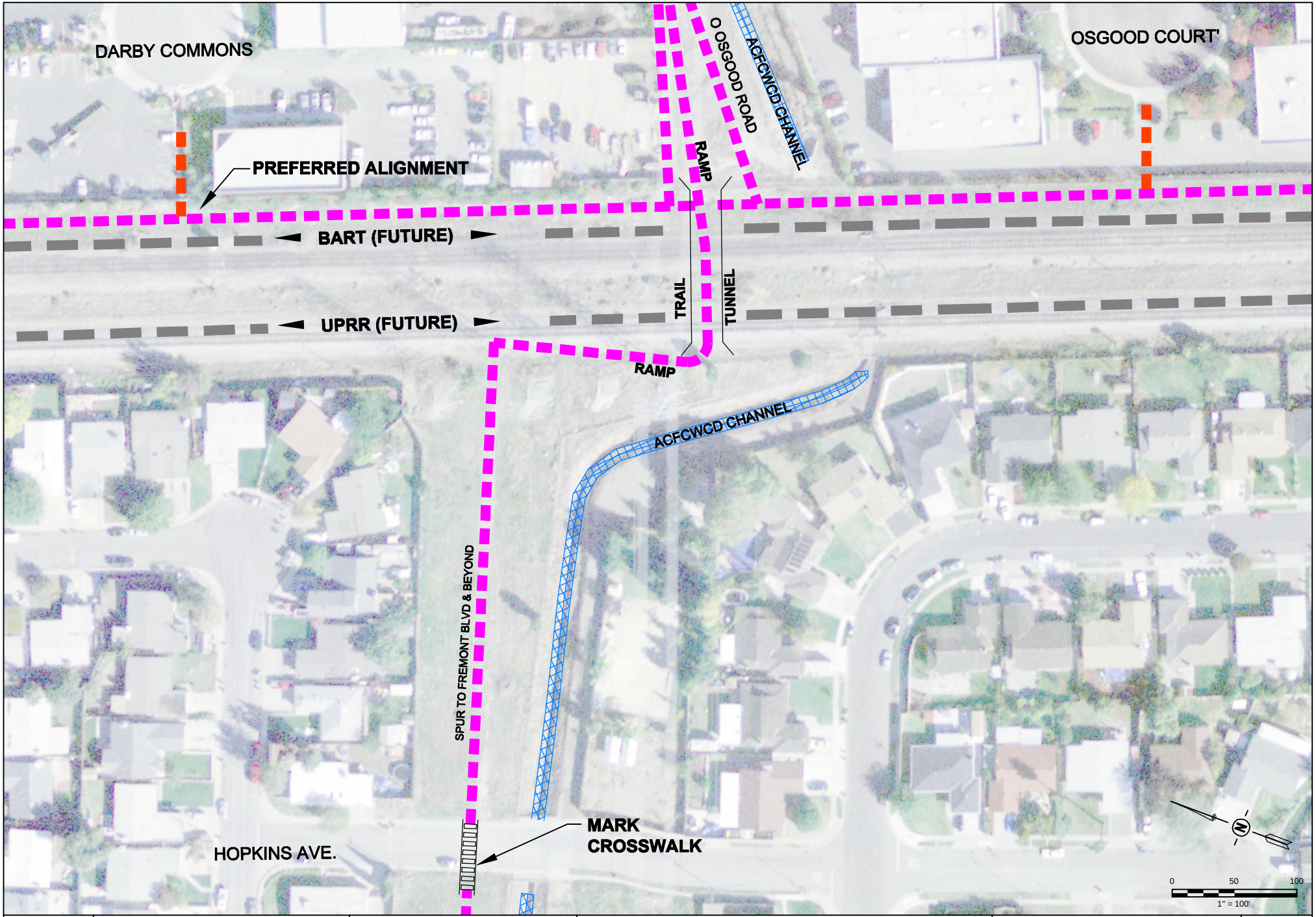
Area	4.2.7
Site	**PG&E Power Line Corridor**
Existing Conditions	An ACFCWCD channel crosses the rail corridor about ¼ mile north of Auto Mall Parkway, in a wide corridor shared with PG&E towers that runs west to I-880. The channel crosses under the railway at the south edge of the corridor. Osgood Road is one block (1,000') east of the railroad; I-680 runs parallel about 1,000' further east. The Osgood corridor is light industrial with driveways and courts extending west almost to the rail corridor. The area to the west is residential, with several streets crossing or opening onto the utility corridor (Hopkins Avenue, Montrose Avenue, Fremont Boulevard, Southlake Commons, Gatewood Street, Cedarwood Drive, Grimmer Boulevard, and Isle Royale Street. The flood channel ties into a larger north-south channel that runs along the east side of Fremont Boulevard almost all the way to Blacow Road before curving into the neighborhood to the east, crossing under the rail corridor between Haven Avenue and Ronald Court.
Trail Context	The power line corridor marks the southern limit of residential Fremont on the west side of the rail corridor. On the east side starting at Washington Boulevard, the land use is light industrial. To the south the Trail could be on the east side, and due to ROW constraints on the west side south of Auto Mall Parkway an east-side alignment is preferable to the south. The tunnel would be located north of the flood channel undercrossing. On the west side of the rail corridor the tunnel ramp could run parallel to the tracks. On the east side it could run parallel to the utility corridor. The power line corridor is an excellent opportunity for an east-west trail with community linkage all the way to I-880 and a possible freeway overcrossing. A rail overcrossing must extend over 25' above the rails. Because of the overhead power lines, a trail tunnel would be preferable to a trail bridge. The maintenance roadway parallel to the flood channel that runs along the east side of Fremont Boulevard could also become a feeder trail provided that its street crossing at Delaware Drive was made as safe as possible. Such a trail could be terminated at Blacow Road east of Fremont Boulevard, or could possibly extend through the neighborhood to the rail corridor, potentially crossing under the tracks to reach the Irvington BART station to the north.
Proposed Improvements	1. Consider a trail undercrossing at this location. 2. On the west side, extend a path south to Auto Mall Parkway and two spur paths from that point to both sides of the Hugo Terrace (Home Depot driveway) intersection. 3. Connect a spur to Hopkins Avenue to the west and Osgood to the east. 4. Plan and implement a trail on the power line corridor between Hopkins and I-880, including crossing enhancements at all cross streets especially Fremont Boulevard and Grimmer Boulevard. 5. Evaluate the feasibility of an I-880 overcrossing on the power-line corridor alignment, accessible from Randall Place and Albrae Street west of I-880. 6. Evaluate the feasibility of a trail on the service road parallel to the flood control channel on the east side of Fremont Boulevard, in two reaches: • Power-line corridor to Blacow Road • Blacow Road to Rail Corridor • Under the Rail Corridor to Osgood Road



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CORRIDOR VIEW PROPOSED TRAIL

UNION PACIFIC RAILROAD
FREMONT, CA

EXISTING	PROPOSED			
		TRAIL AND SPURS		POTENTIAL TRAIL
		SIDEWALK		BART
		BIKE LANE		WATERWAY
		RAILROAD TRACKS		IMPROVEMENT AREAS

POWER LINE CORRIDOR (DETAIL)

AREA
4.2.7

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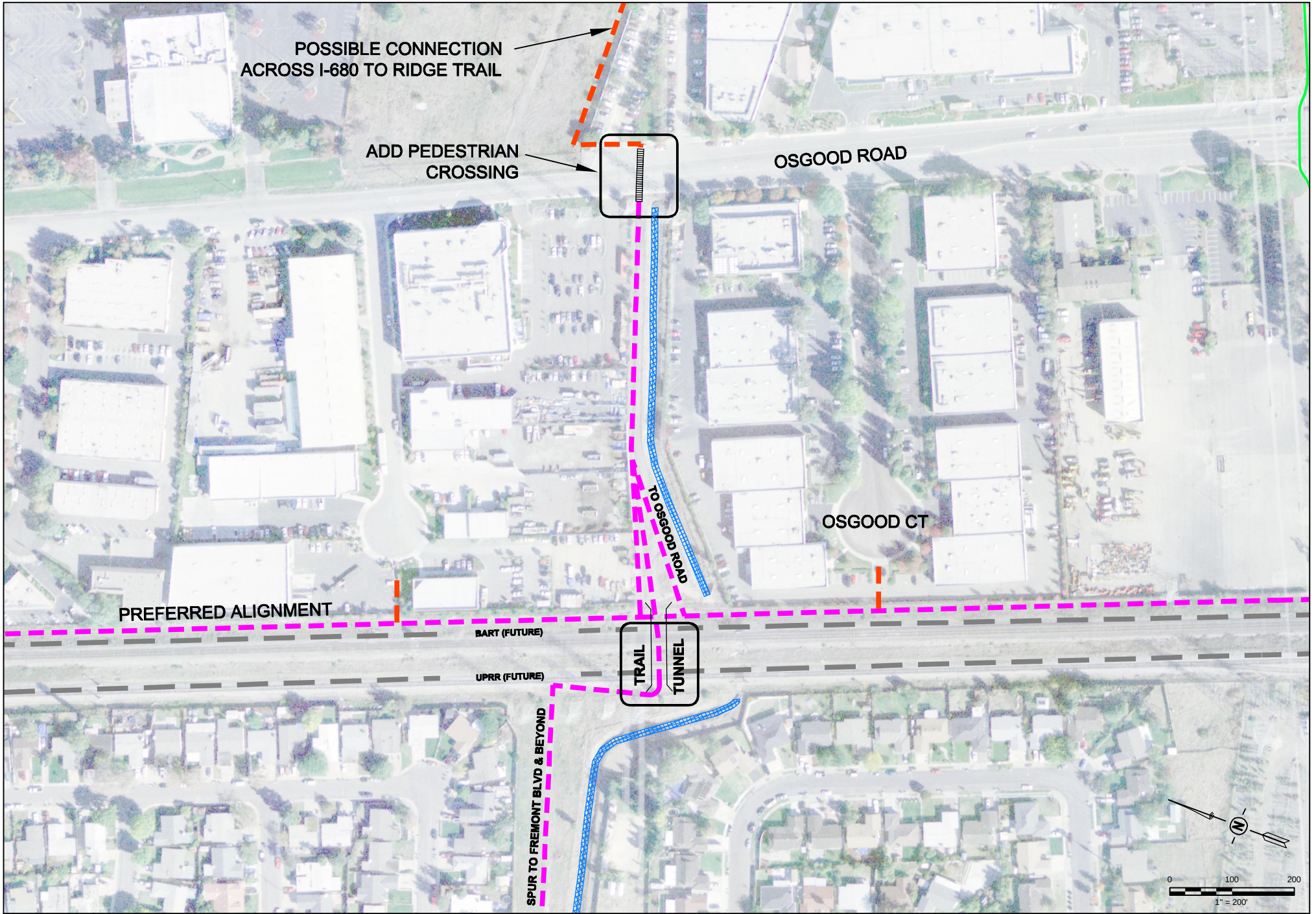

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CORRIDOR VIEW
PROPOSED TRAIL
UNION PACIFIC RAILROAD
FREMONT, CA

EXISTING	PROPOSED			
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		SIDEWALK		BART
		BIKE LANE		WATERWAY
		RAILROAD TRACKS		IMPROVEMENT AREAS

POWER LINE CORRIDOR (OVERVIEW)

AREA
4.2.7

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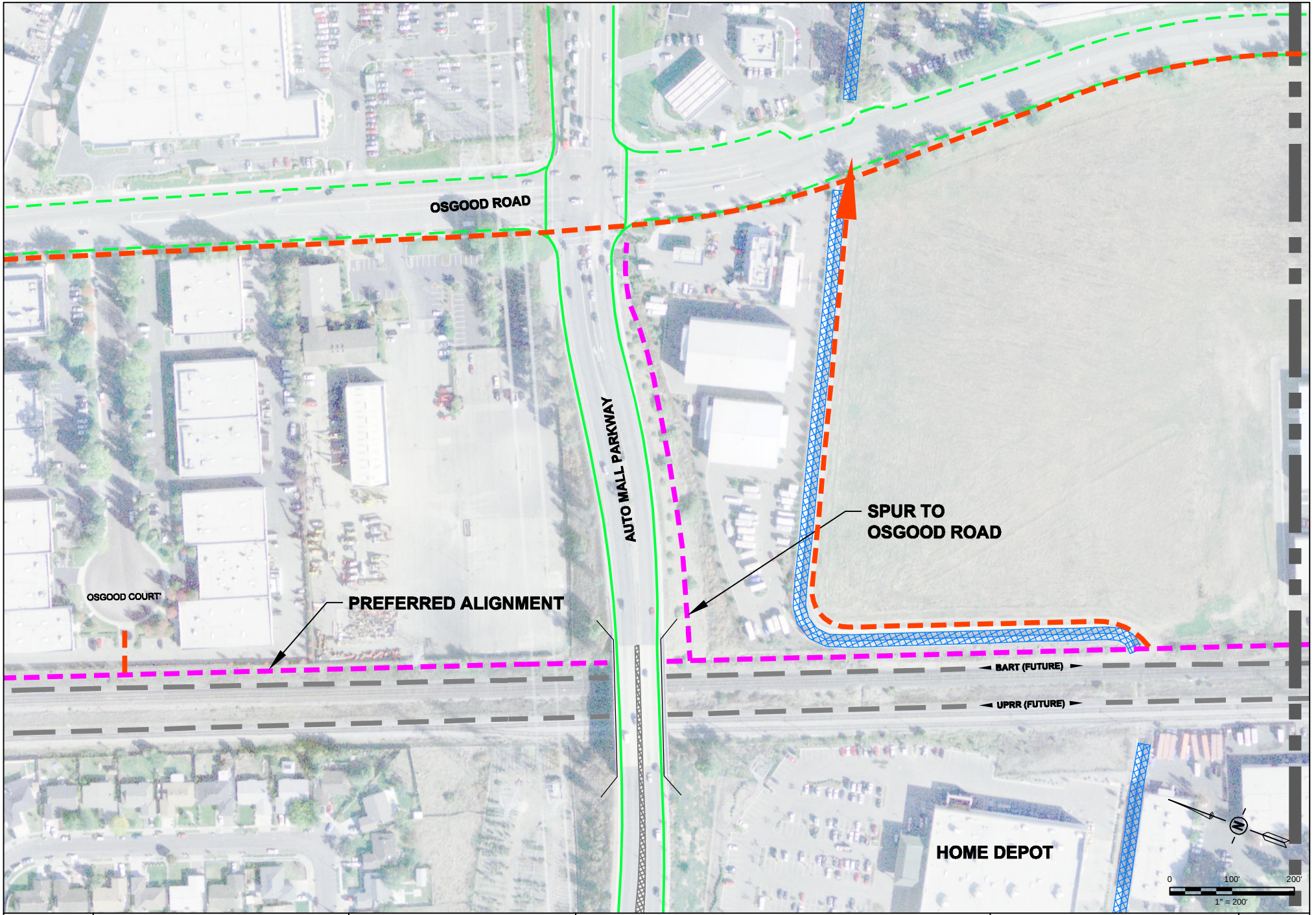
Area	**4.3 (East)**
Site	**Auto Mall Parkway / Osgood Road connections**
Existing Conditions	Auto Mall Parkway crosses over the rail corridor on a long overpass that touches down at Hugo Terrace (Home Depot entrance) on the west side and Osgood Road on the east side. There are no driveways or other access points on the road between the rail corridor and these endpoints. Auto Mall Parkway has bike lanes and sidewalks on this segment.
Trail Context	The Trail will pass under Auto Mall Parkway with the mainline trail on the east side of the rail corridor as shown, continuing south past Wal-Mart (off the bottom of the figure). The Osgood Road signal would be served via the south-side spur shown in this figure. Only one spur is needed at this location; bicyclists and pedestrians bound to or from other corners of the signal can use the crosswalks.
Proposed Improvements	1. Pave a spur trail along the south side of Auto Mall Parkway's east embankment leading to Osgood Road, at the foot of the embankment. 2. Connect the spur to the southwest corner of the Osgood signal. 3. Provide access points to the land uses along the spur, as needed. 4. Optionally, provide a staircase to connect Auto Mall Parkway's south sidewalk down the embankment to the spur trail.



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CORRIDOR VIEW
PROPOSED TRAIL

UNION PACIFIC RAILROAD
FREMONT, CA

EXISTING	PROPOSED			
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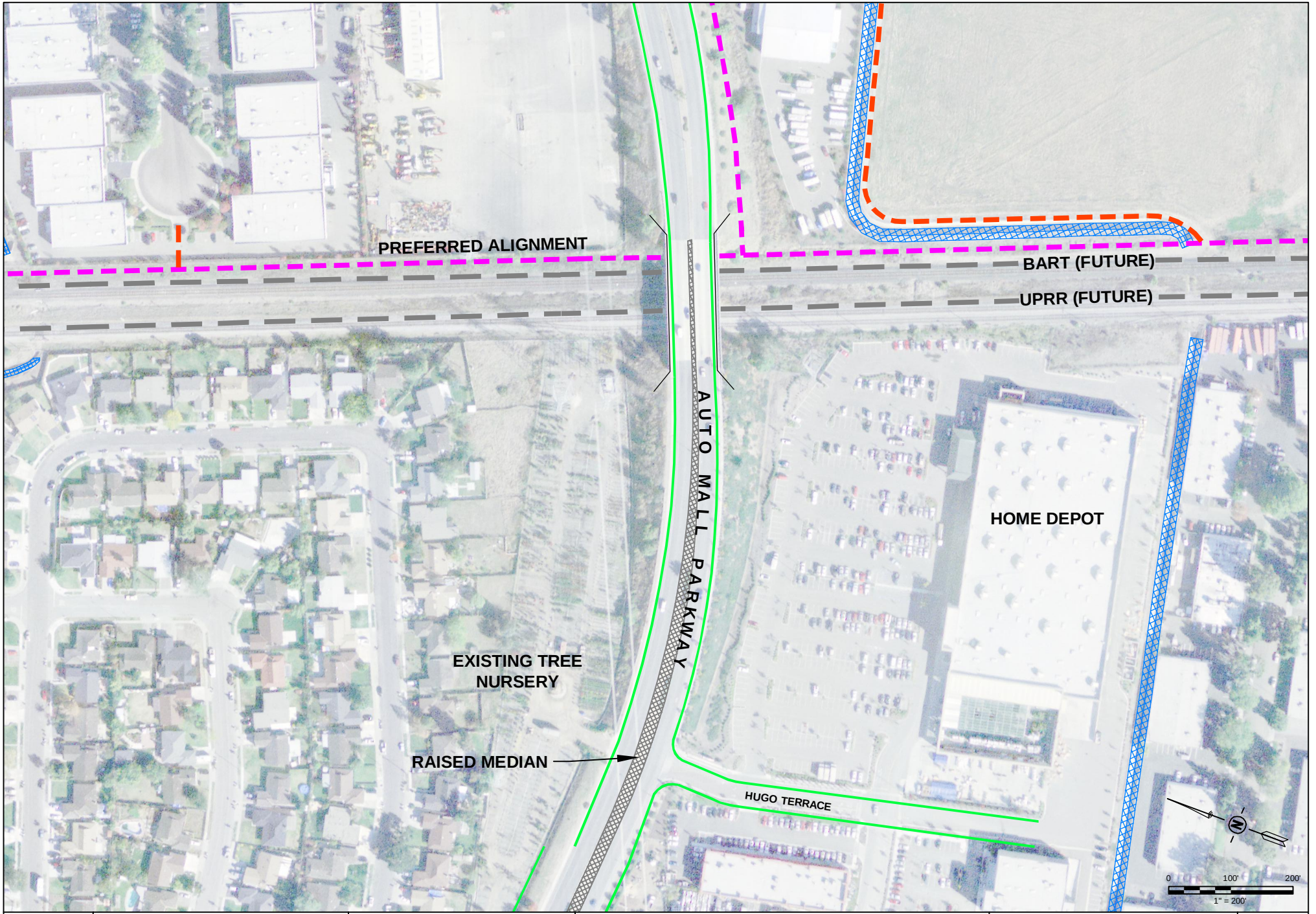
		SIDEWALK		BART
		BIKE LANE		WATERWAY
		RAILROAD TRACKS		IMPROVEMENT AREAS

AUTO MALL PKWY
WEST

AREA
4.3

PLOT BY: BARRY J. VANDERENT DATE: 5/26/2010 SCALE: 9/128" = 1' FILE: P:\2005\250234_FREMONT_UPRR_CORRIDOR_TRAIL\CAD\FREMONT_PROPOSED_TRAIL.DWG PAGE SETUP: ---- PENSTYLES: ----

Area	**4.3 (West)**
Site	**Auto Mall Parkway / Hugo Terrace and Home Depot connections**
Existing Conditions	Auto Mall Parkway crosses over the rail corridor on a long overpass that touches down at Hugo Terrace (Home Depot entrance) on the west side and Osgood Road on the east side. There are no driveways or other access points on the road between the rail corridor and these endpoints. Auto Mall Parkway has bike lanes and sidewalks on this segment.
Trail Context	The Trail will pass under Auto Mall Parkway. Aligning the mainline trail on the east side of the rail corridor at this point, as shown, would serve the Osgood Road signal via the spur shown in the previous figure, and would serve Wal-Mart just to the south. A spur would extend south from the PG&E Power Line Corridor along the west side of the corridor as shown to serve Home Depot and also connect to Auto Mall Parkway's north sidewalk and eastbound bike lane.
Proposed Improvements	



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CORRIDOR VIEW PROPOSED TRAIL

UNION PACIFIC RAILROAD
FREMONT, CA

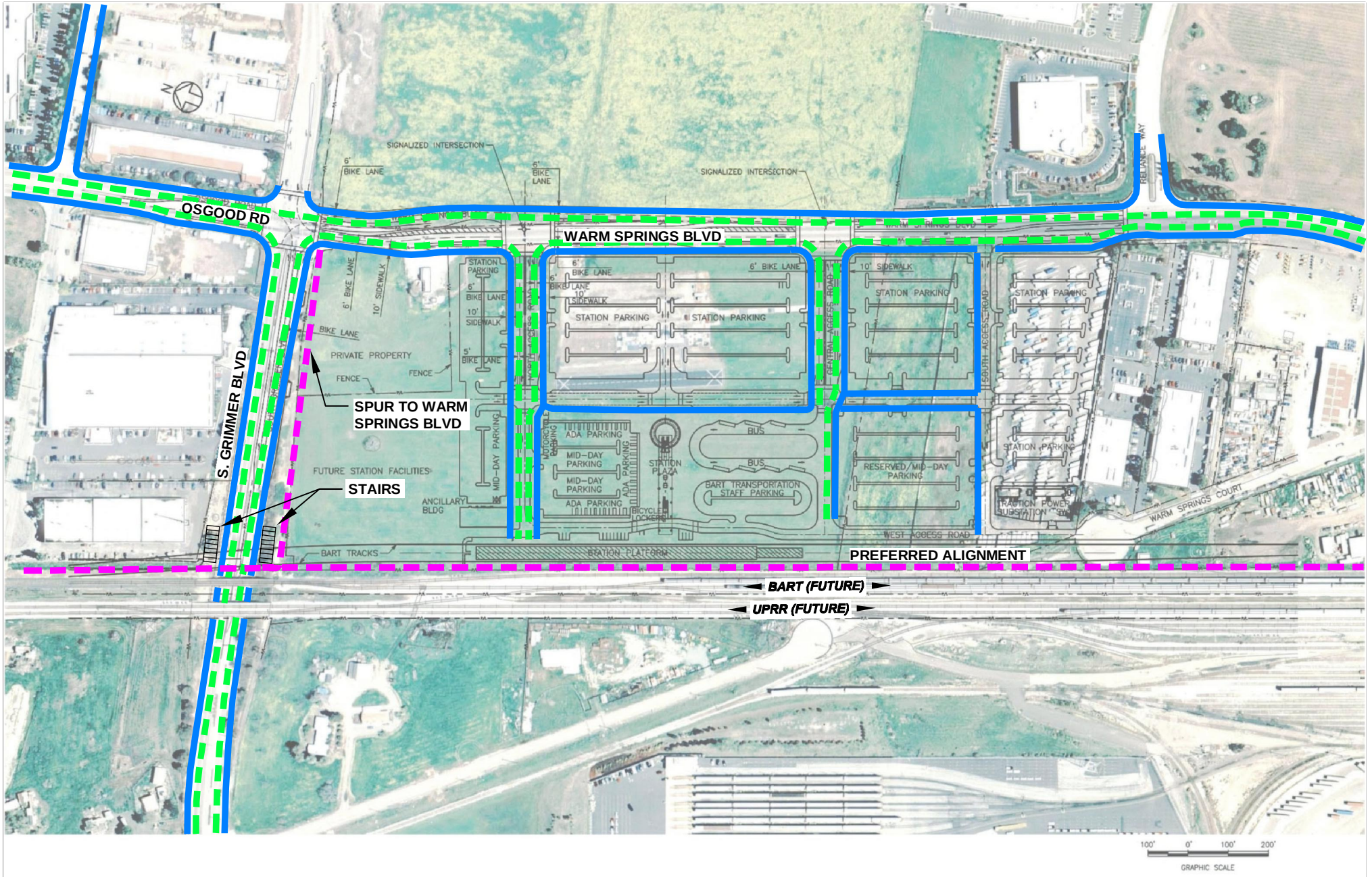
EXISTING	PROPOSED			
		TRAIL AND SPURS		POTENTIAL TRAIL
		SIDEWALK		BART
		BIKE LANE		WATERWAY
		RAILROAD TRACKS		IMPROVEMENT AREAS

AUTO MALL PKWY EAST

AREA
4.3

PLOT BY: BARRY J. VANDERENT DATE: 5/26/2010 SCALE: 9/128" = 1' FILE: P:\2005\250234_FREMONT_UPRR_CORRIDOR_TRAIL\CAD\FREMONT_PROPOSED_TRAIL.DWG PAGE SETUP: ---- PENSTYLES: ----

Area	**5.1.1**
Site	**BART Warm Springs station**
Existing Conditions	There is currently an open field at this location. When the station is constructed, the station building will be on the east edge of the rail corridor. Its east face will have no public entrances because the fare-gates will be one level above street grade, accessed from the parking lot via escalators, stairs, and elevators. The station parking lot plan shows several head-in parking spaces along the station building's east face.
Trail Context	The Trail should be on the east side of the rail corridor at this point. It can pass through the station complex along the east face of the station building. This alignment is free of all vehicular and bicycle cross-traffic; the only pedestrian cross-traffic would be station maintenance and security personnel who might need to access doors at street level on the east face of the building. Warm Springs Boulevard will have bike lanes, and the station parking lot's two main driveways will have bike lanes between South Grimmer Boulevard and the first internal intersection as shown.
Proposed Improvements	1. Construct a trail bridge over South Grimmer Boulevard at the east edge of the railroad ROW. 2. Construct the trail along the east face of the BART station building. 3. Connect the Trail to and across Warm Springs Court just south of the station parking lot.



Design:	JCC/MH
Drawn:	BJV
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Appr'd:	03-21-07

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CORRIDOR VIEW
PROPOSED TRAIL
UNION PACIFIC RAILROAD
FREMONT, CA

EXISTING	PROPOSED			
		TRAIL AND SPURS		POTENTIAL TRAIL
		SIDEWALK		BART
		BIKE LANE		WATERWAY
		RAILROAD TRACKS		IMPROVEMENT AREAS

BART
WARM SPRINGS BLVD

AREA
5.1.1

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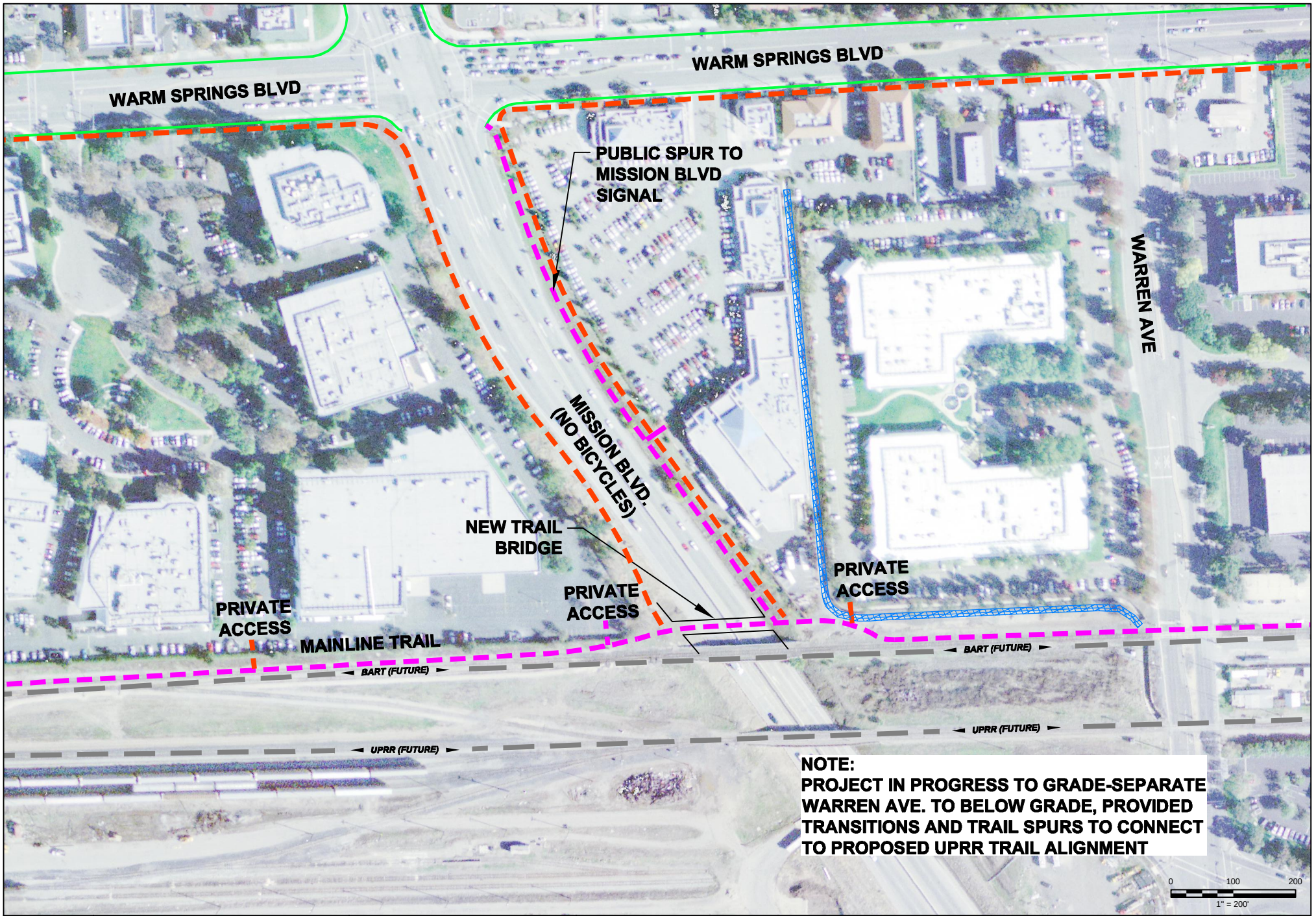
Area	**5.2.1**
Site	**Mission Boulevard (south) and Warm Springs Boulevard signal**
Existing Conditions	Mission Boulevard is a limited-access highway west of Warm Springs Boulevard. It crosses under the rail corridor, which consists of two rail bridges separated by an open space. Warm Springs Boulevard parallels the rail corridor approximately 1,000' to the east, intersecting with Mission Boulevard at a signal. I-680 is approximately ½ mile further east, parallel to Warm Springs Boulevard. Fremont's southern residential area lies between Warm Springs Boulevard and I-680 south of Mission Boulevard, extending south to the Milpitas city limit. On the south side of Mission between the rail corridor and Warm Springs Boulevard is a retail complex. There is a level section atop the south embankment of Mission Boulevard along the north edge of the shopping center parking lot. ***Note:*** *Project in progress to grade separate Warren Avenue (Warren Avenue will be below grade).*
Trail Context	A spur trail to the Mission Boulevard / Warm Springs Boulevard signal will serve commercial and light industrial areas near the signal, and will directly serve the retail complex near the Trail.
Proposed Improvements	1. Construct a separate trail bridge across Mission Boulevard, spanning the existing highway embankments. 2. Add a spur trail to the south corner of the Mission Boulevard / Warm Springs Boulevard signal. 3. Add an access point from the spur trail to the front sidewalk of the adjacent retail complex. This is a good location for bicycle parking to serve that end of the complex.



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CORRIDOR VIEW PROPOSED TRAIL

UNION PACIFIC RAILROAD
FREMONT, CA

EXISTING	PROPOSED			
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		SIDEWALK		BART
		BIKE LANE		WATERWAY
		RAILROAD TRACKS		IMPROVEMENT AREAS

MISSION AND WARM SPRINGS BLVD

AREA 5.2.1

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Area	5.2.3
Site	**Westinghouse Drive – Fourier Avenue – Lippert Avenue**
Existing Conditions	Between Mission Boulevard and the south city limit, Warm Springs Boulevard parallels the rail corridor about 1,000' to the east. The area between is occupied by light industrial and warehouse uses. Several ACFCWCD channels run perpendicular to the rail corridor and offer opportunities for spur trails to Warm Springs Boulevard, which are especially valuable if they connect to signals that provide access into the residential developments to the east. One such signal is Fourier Avenue / Lippert Avenue, which connects to an ACFCWCD channel that crosses Westinghouse Drive.
Trail Context	A spur trail along the channel that crosses Westinghouse Drive near Fourier Avenue could connect to the Fourier / Lippert signal on Warm Springs Boulevard with a short (300') segment of widened sidewalk along Warm Springs. This would provide a direct access to the Trail from the neighborhood to the east.
Proposed Improvements	1. Pave a spur trail on the unpaved service road along the ACFCWCD channel between the Trail and Warm Springs Boulevard. 2. Widen the west sidewalk of Warm Springs Boulevard between the channel and Fourier Avenue for use as a two-way sidepath link to the signal. 3. Add crosswalk markings and warning signage where the channel crosses under Westinghouse Drive. 4. Add guide signage to the Trail from Warm Springs Boulevard, Lippert Avenue, Fourier Avenue, and Westinghouse Drive.

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CORRIDOR VIEW
PROPOSED TRAIL
UNION PACIFIC RAILROAD
FREMONT, CA

EXISTING	PROPOSED			
		TRAIL AND SPURS		POTENTIAL TRAIL
		SIDEWALK		BART
		BIKE LANE		WATERWAY
		RAILROAD TRACKS		IMPROVEMENT AREAS

WESTINGHOUSE - FOURIER

AREA
5.2.3

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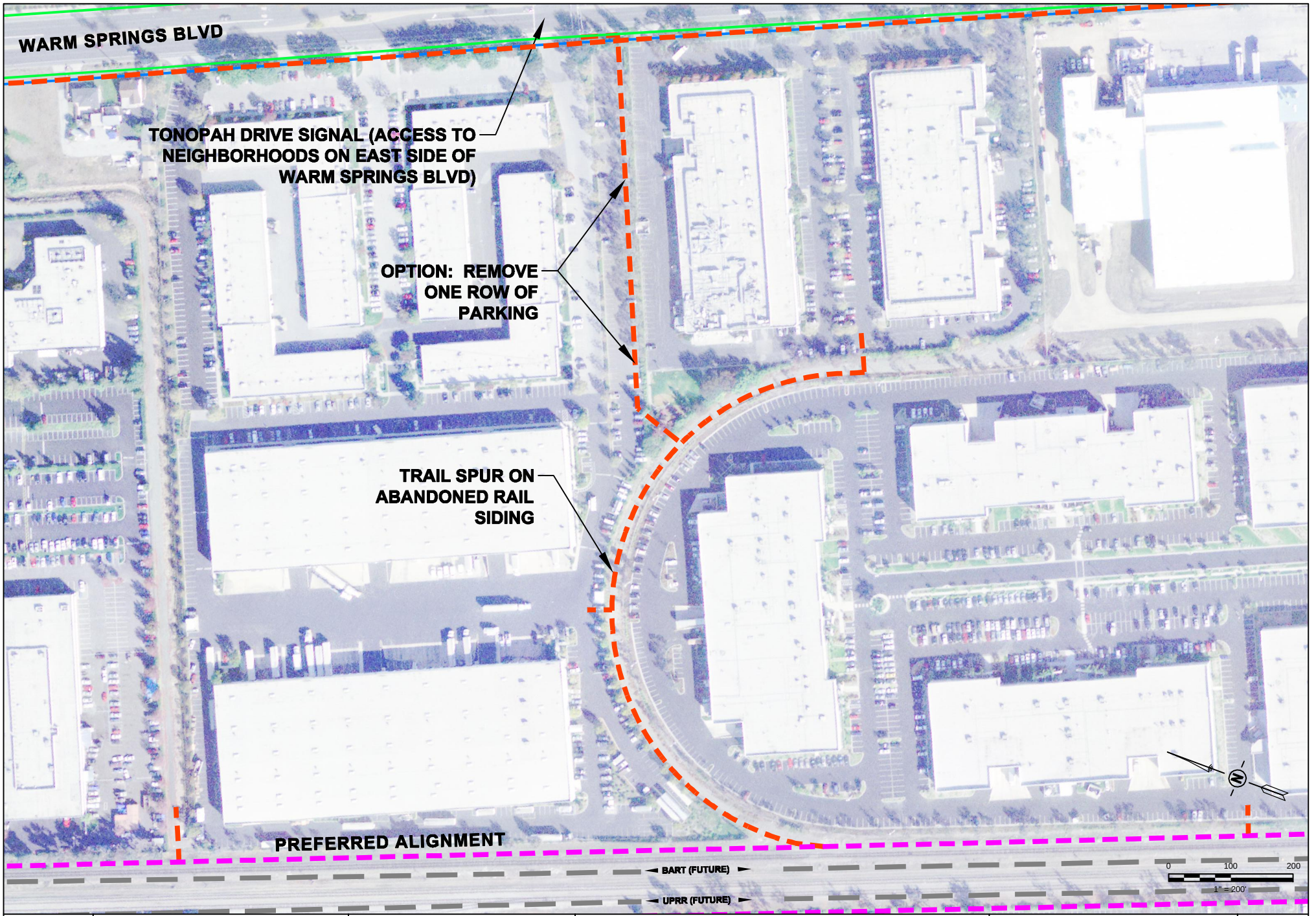
Area	**5.3.4**
Site	**Abandoned rail spur to Tonopah Drive signal (neighborhod access)**
Existing Conditions	Between Mission Boulevard and the south city limit, Warm Springs Boulevard parallels the rail corridor about 1,000' to the east. The area between is occupied by light industrial and warehouse uses. East of Warm Springs Boulevard are residential neighborhoods with access onto Warm Springs at signals such as the one at Tonopah Drive. Near this signal, a semicircular abandoned rail spur covers half the distance between the active rail corridor and Warm Springs Boulevard. There is parking on both sides of the spur but no buildings or storage directly on it. A large parking lot between two buildings spans the remaining distance between the spur and the signal.
Trail Context	The Trail will run along the east side of the rail corridor in this area. There is an opportunity for a neighborhood connection via Tonopah Drive signal, and to provide Trail access to light industrial uses along the abandoned rail spur.
Proposed Improvements	1. Pave a spur trail around the entire half-circle of the abandoned spur. 2. Remove one row of parking from the lot between the semicircular spur and Warm Springs Boulevard, at the point on the semicircle where there will be no cross traffic within the parking lot. 3. Extend the spur trail through the parking lot to the Tonopah Drive signal using the width freed up through the parking lot by removing parking. 4. Provide access points to adjacent buildings along the semicircular spur.



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CORRIDOR VIEW PROPOSED TRAIL

UNION PACIFIC RAILROAD
FREMONT, CA

EXISTING	PROPOSED			
		TRAIL AND SPURS		POTENTIAL TRAIL
		SIDEWALK		BART
		BIKE LANE		WATERWAY
		RAILROAD TRACKS		IMPROVEMENT AREAS

RAIL SPUR TO TO TONOPAH DRIVE

AREA
5.3.4

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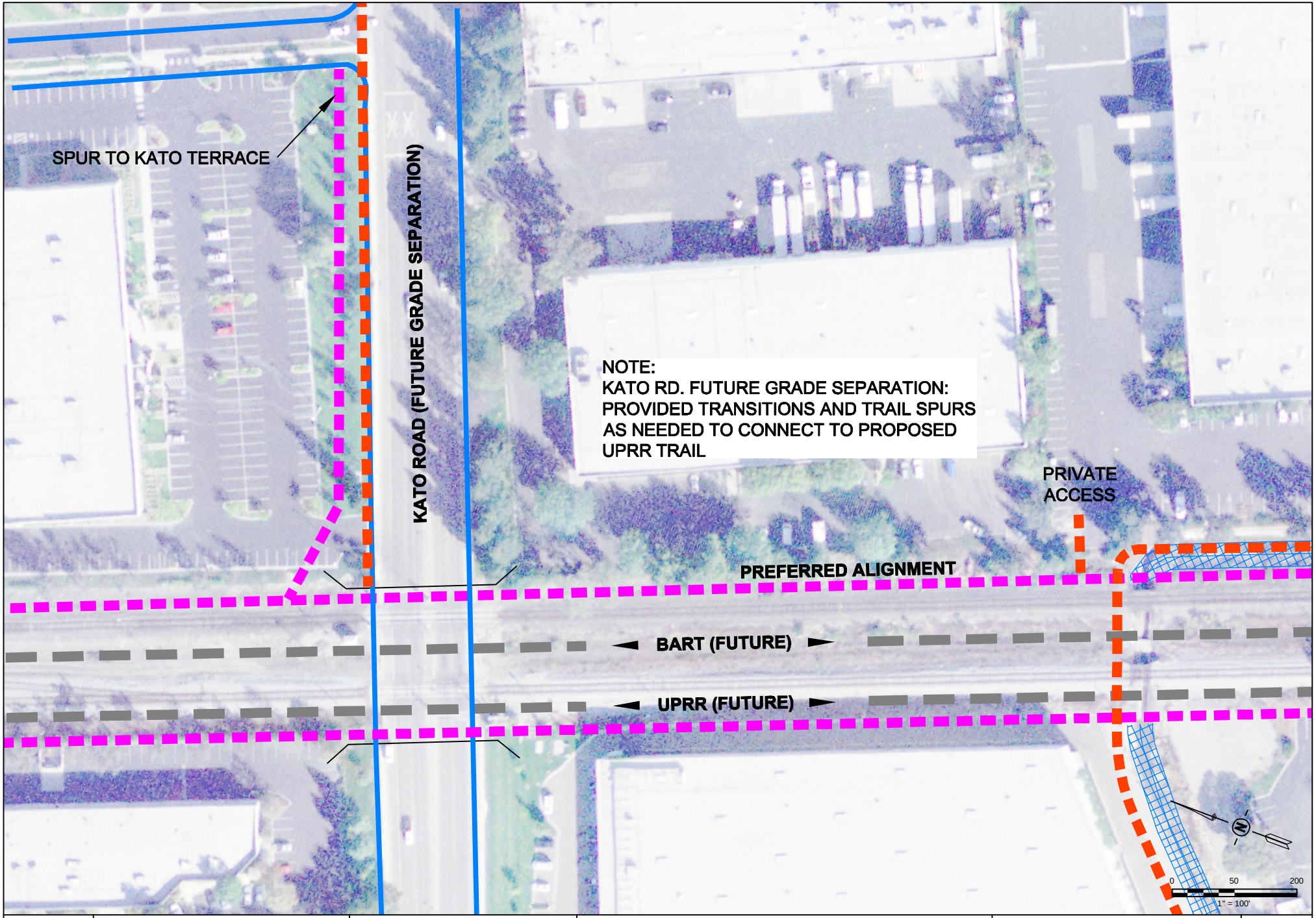
Area	**5.3.5**
Site	**Kato Road**
Existing Conditions	Kato Road currently crosses the rail corridor at grade; it has sidewalks and bike lanes. When BART is added, Kato will be depressed under the rail corridor, returning to surface grade at or near the unsignalized Kato Terrace "T" intersection, about 300' to the east.
Trail Context	The Trail should run along the east side of the rail corridor at this location. Pedestrian and bicycle access can be provided by a single spur along the north side of Kato Road to the Kato Terrace intersection. At that intersection an uncontrolled crosswalk can be provided across Kato Road to serve pedestrians on the south sidewalk.
Proposed Improvements	1. Provide a spur trail on the north side of Kato Road to Kato Terrace. 2. Provide a marked crosswalk across Kato Terrace 3. Provide a marked uncontrolled crosswalk across Kato Road on the east leg of the Kato Terrace "T" intersection, with appropriate warning signage. The east leg is preferable to the west leg because it has no incoming uncontrolled left turn movement. If it is difficult for pedestrians to cross Kato Road at this location, consider adding active warning flashers.



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PROPOSED TRAIL

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		SIDEWALK		BART
		BIKE LANE		WATERWAY
		RAILROAD TRACKS		IMPROVEMENT AREAS

KATO ROAD
FUTURE UNDERCROSSING

AREA
5.3.5

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